



STIC Search Report

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TO: James Schultz
Location: REM-2D18/2C18
Art Unit: 1635
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From: Paul Schulwitz
Location: Biotech-Chem Library
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Search Notes

Examiner Schultz,

See attached results.

If you have any questions about this search feel free to contact me at any time.

Thank you for using STIC search services!

Paul Schulwitz
Technical Information Specialist
STIC Biotech/Chem Library
(571)272-2527




```

KM pp-GaNTase 10; EC 2.4.1.41; chromosome 7q11.2; gene therapy; scanning;
KW ss.
OS Homo sapiens.
OS Synthetic.
XX EPI243660-A2.
XX
XX 25-SEP-2002.
XX
XX 25-JAN-2002; 2002EP-00001161.
XX
XX 30-JAN-2001; 2001WO-US000663.
XX 30-JAN-2001; 2001WO-US000663.
XX 30-JAN-2001; 2001WO-US000665.
XX 30-JAN-2001; 2001WO-US000665.
XX 30-JAN-2001; 2001WO-US000667.
XX 30-JAN-2001; 2001WO-US000667.
XX 30-JAN-2001; 2001WO-US000668.
XX 30-JAN-2001; 2001WO-US000669.
XX 30-JAN-2001; 2001WO-US000670.
XX 23-MAY-2001; 2001US-00864761.
XX 30-AUG-2001; 2001US-0315984P.
XX
XX (AEOM-) AEOMICA INC.
XX
XX Zhang J, Gu Y, Nguyen C;
XX
XX WPI; 2002-724954/79.
XX
XX Nucleic acid encoding human UDP-GalNAc:polypeptide N-
XX cetylalactosaminyltransferase 10 protein is useful to diagnose, prevent
XX and treat disorders associated with reduced or over expression of the
XX encoded protein.
XX
XX Example 2; SEQ ID NO 703; 59pp; English.
XX
XX The present invention describes an isolated nucleic acid (I) encoding a
XX human UDP-GalNAc:polypeptide N-acetylalactosaminyltransferase 10 (pp-
XX GaNTase 10; EC 2.4.1.41) protein. Human pp-GaNTase 10 is located to
XX chromosome 7q11.2. (I) can be used in gene therapy. Molecules of the
XX present invention can be used in therapy, particularly to prevent or
XX treat a disorder associated with decreased expression or activity of pp-
XX GaNTase 10. The sequences given in ABV85011 to ABV86689 and ABP3502 to
XX ABP3504 are given in the exemplification of the present invention. N.B.
XX The sequence data for this patent is not represented in the printed
XX specification but is based on sequence information supplied by the
XX European Patent Office
XX
XX Sequence 17 BP; 2 A; 3 C; 9 G; 3 T; 0 U; 0 Other;
XX
XX Query Match 2.8%; Score 11.8; DB 1; Length 17;
XX Best Local Similarity 86.7%; Pred. No. 5e+02;
XX Matches 13; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
XX
XX 286 CCAAGCTGTGAAG 300
XX |||||
XX 1 CCGGGCTGTGAAG 15
XX
XX RESULT 1047
XX ABV85709
XX ID ABV85709 standard; DNA; 17 BP.
XX
XX ABV85709;
XX
XX 11-DEC-2002 (first entry)
XX
XX Human pp-GaNTase 10 scanning 17-mer SEQ ID NO:702.
XX
XX Human; UDP-GalNAc:polypeptide N-acetylalactosaminyltransferase 10;
XX pp-GaNTase 10; EC 2.4.1.41; chromosome 7q11.2; gene therapy; scanning;
XX 89.
XX

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OS Homo sapiens.
OS Synthetic.
XX EPI243660-A2.
XX
XX 25-SEP-2002.
XX
XX 25-JAN-2002; 2002EP-00001161.
XX
XX 30-JAN-2001; 2001WO-US000663.
XX 30-JAN-2001; 2001WO-US000664.
XX 30-JAN-2001; 2001WO-US000665.
XX 30-JAN-2001; 2001WO-US000666.
XX 30-JAN-2001; 2001WO-US000667.
XX 30-JAN-2001; 2001WO-US000668.
XX 30-JAN-2001; 2001WO-US000669.
XX 30-JAN-2001; 2001WO-US000670.
XX 23-MAY-2001; 2001US-00864761.
XX 30-AUG-2001; 2001US-0315984P.
XX
XX (AEOM-) AEOMICA INC.
XX
XX Zhang J, Gu Y, Nguyen C;
XX
XX WPI; 2002-724954/79.
XX
XX Nucleic acid encoding human UDP-GalNAc:polypeptide N-
XX cetylalactosaminyltransferase 10 protein is useful to diagnose, prevent
XX and treat disorders associated with reduced or over expression of the
XX encoded protein.
XX
XX Example 2; SEQ ID NO 702; 59pp; English.
XX
XX The present invention describes an isolated nucleic acid (I) encoding a
XX human UDP-GalNAc:polypeptide N-acetylalactosaminyltransferase 10 (pp-
XX GaNTase 10; EC 2.4.1.41) protein. Human pp-GaNTase 10 is located to
XX chromosome 7q11.2. (I) can be used in gene therapy. Molecules of the
XX present invention can be used in therapy, particularly to prevent or
XX treat a disorder associated with decreased expression or activity of pp-
XX GaNTase 10. The sequences given in ABV85011 to ABV86689 and ABP3502 to
XX ABP3504 are given in the exemplification of the present invention. N.B.
XX The sequence data for this patent is not represented in the printed
XX specification but is based on sequence information supplied by the
XX European Patent Office
XX
XX Sequence 17 BP; 2 A; 4 C; 8 G; 3 T; 0 U; 0 Other;
XX
XX Query Match 2.8%; Score 11.8; DB 1; Length 17;
XX Best Local Similarity 86.7%; Pred. No. 5e+02;
XX Matches 13; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
XX
XX 286 CCAAGCTGTGAAG 300
XX |||||
XX 2 CCGGGCTGTGAAG 16
XX
XX RESULT 1048
XX ABK25243/C
XX ID ABK25243 standard; DNA; 17 BP.
XX
XX ABK25243;
XX
XX 09-APR-2002 (first entry)
XX
XX Male-sterile plant producing genome altering oligonucleotide #143.
XX
XX Chromosomal genomic alteration; genome altering oligonucleotide; PCR; ss;
XX O-methyl modification; LNA modification; phosphorothioate linkage;
XX DNA repair; DNA alteration; environmental tolerance; hygromycin-B;
XX abiotic stress tolerance; improved nutritional value; hygromycin-B;
XX amino acid over production; herbicide resistance; glyphosate resistance;
XX imidazolinone herbicide resistance; sulphonylurea herbicide resistance;
XX porphyrin herbicide resistance; triazine resistance; disease resistance;
XX

```

KM modified oil production; modified starch production; waxy starch;
 KM altered floral morphology; male-sterile plant; albino mutant;
 KM modified fatty acid content; reduced palmitate production; albino plant;
 KM increased stearate production; reduced linolenic acid production;
 KM photosynthetic process.
 OS Trifolium aestivum.
 OS Synthetic.
 PN WO200192512-A2.
 XX 06-DEC-2001.
 PD 01-JUN-2001; 2001WO-US017672.
 PF 01-JUN-2000; 2000US-0208538P.
 PR 30-OCT-2000; 2000US-0244989P.
 PR 27-MAR-2001; 2001US-00818875.
 XX (UYDE) UNIV DELAWARE.
 PA Kmiec EB, Gamper HB, Rice MC, Kim J;
 PI WPI; 2002-106307/14.
 DR New oligonucleotides with modified nuclease-resistant termini, useful for
 PT creating plants with desired phenotypes, e.g. stress tolerance, improved
 PT nutritional value, herbicide or disease resistance, or modified oil
 PT production.
 XX Claim 7; Page 79; 220pp; English.
 PS The invention relates to an oligonucleotide for targeted alteration of a
 CC genetic sequence, which comprises a single-stranded oligonucleotide
 CC having a DNA domain. The DNA domain has at least one mismatch with
 CC respect to the genetic sequence to be altered and further comprises
 CC chemical modifications of the oligonucleotide. The chemical modifications
 CC consist of O-methyl modification, an RNA modification, two or more
 CC phosphorothioate linkages on a terminus, or a combination of any two or
 CC more of these modifications. The oligonucleotides are useful for
 CC directing repair or alteration of plant genetic information. The
 CC oligonucleotides are particularly useful for creating plants with desired
 CC phenotypes, e.g. environmental or abiotic stress tolerance, improved
 CC nutritional value (e.g. altering amino acid content of plants or
 CC conferring amino acid over production), herbicide resistance (e.g.
 CC glyphosate resistance, imidazolinone and sulphonylurea herbicide
 CC resistance, porphyrin herbicide resistance or triazine resistance),
 CC disease resistance, modified oil production, modified starch production
 CC (e.g. increased starch or production of waxy starch), altered floral
 CC morphology (e.g. male-sterile plants) or modified fatty acid content
 CC (e.g. reduced palmitate, increased stearate or reduced linolenic acid).
 CC The oligonucleotides are also useful for producing albino mutants for the
 CC analysis of photosynthetic processes. This sequence represents a genome
 CC altering oligonucleotide of the invention
 CC XX
 SQ Sequence 17 BP; 5 A; 2 C; 7 G; 3 T; 0 U; 0 Other;
 Query Match 2.8%; Score 11.8; DB 1; Length 17;
 Best Local Similarity 86.7%; Pred. No. 5e+02;
 Matches 13; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
 QY 402 GTCTTCTACGTGATC 416
 DB 16 GCCTTCTACGTGATC 2
 RESULT 1049
 ABK25256
 ID ABK25256 standard; DNA; 17 BP.
 XX ABK25256;
 AC
 XX 09-APR-2002 (first entry)

XX Male-sterile plant producing genome altering oligonucleotide #156.
 DE Chromosomal genomic alteration; genome altering oligonucleotide; PCR; ss;
 XX O-methyl modification; RNA modification; phosphorothioate linkage;
 KM DNA repair; DNA alteration; environmental tolerance; hygromycin-B;
 KM abiotic stress tolerance; improved nutritional value; hygromycin-B;
 KM amino acid over production; herbicide resistance; glyphosate resistance;
 KM imidazolinone herbicide resistance; sulphonylurea herbicide resistance;
 KM porphyrin herbicide resistance; triazine resistance; disease resistance;
 KM modified oil production; modified starch production; waxy starch;
 KM altered floral morphology; male-sterile plant; albino mutant;
 KM modified fatty acid content; reduced palmitate production; albino plant;
 KM increased stearate production; reduced linolenic acid production;
 KM photosynthetic process.
 OS Zea mays.
 OS Synthetic.
 PN WO200192512-A2.
 XX 06-DEC-2001.
 PD 01-JUN-2001; 2001WO-US017672.
 PF 01-JUN-2000; 2000US-0208538P.
 PR 30-OCT-2000; 2000US-0244989P.
 PR 27-MAR-2001; 2001US-00818875.
 XX (UYDE) UNIV DELAWARE.
 PA Kmiec EB, Gamper HB, Rice MC, Kim J;
 PI WPI; 2002-106307/14.
 DR New oligonucleotides with modified nuclease-resistant termini, useful for
 PT creating plants with desired phenotypes, e.g. stress tolerance, improved
 PT nutritional value, herbicide or disease resistance, or modified oil
 PT production.
 XX Claim 7; Page 80; 220pp; English.
 PS The invention relates to an oligonucleotide for targeted alteration of a
 CC genetic sequence, which comprises a single-stranded oligonucleotide
 CC having a DNA domain. The DNA domain has at least one mismatch with
 CC respect to the genetic sequence to be altered and further comprises
 CC chemical modifications of the oligonucleotide. The chemical modifications
 CC consist of O-methyl modification, an RNA modification, two or more
 CC phosphorothioate linkages on a terminus, or a combination of any two or
 CC more of these modifications. The oligonucleotides are useful for
 CC directing repair or alteration of plant genetic information. The
 CC oligonucleotides are particularly useful for creating plants with desired
 CC phenotypes, e.g. environmental or abiotic stress tolerance, improved
 CC nutritional value (e.g. altering amino acid content of plants or
 CC conferring amino acid over production), herbicide resistance (e.g.
 CC glyphosate resistance, imidazolinone and sulphonylurea herbicide
 CC resistance, porphyrin herbicide resistance or triazine resistance),
 CC disease resistance, modified oil production, modified starch production
 CC (e.g. increased starch or production of waxy starch), altered floral
 CC morphology (e.g. male-sterile plants) or modified fatty acid content
 CC (e.g. reduced palmitate, increased stearate or reduced linolenic acid).
 CC The oligonucleotides are also useful for producing albino mutants for the
 CC analysis of photosynthetic processes. This sequence represents a genome
 CC altering oligonucleotide of the invention
 CC XX
 SQ Sequence 17 BP; 3 A; 6 C; 2 G; 6 T; 0 U; 0 Other;
 Query Match 2.8%; Score 11.8; DB 1; Length 17;
 Best Local Similarity 86.7%; Pred. No. 5e+02;
 Matches 13; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
 QY 402 GTCTTCTACGTGATC 416

Db 2 GCCTTCTACATGATC 16

RESULT 1050
ABK25255/c
ID ABK25255 standard; DNA; 17 BP.
AC ABK25255;
XX
DT 09-APR-2002 (first entry)
XX
DE Male-sterile plant producing genome altering oligonucleotide #155.
XX
KW Chromosomal genomic alteration; genome altering oligonucleotide; PCR; ss;
KW o-methyl modification; LNA modification; phosphorothioate linkage;
KW DNA repair; DNA alteration; environmental tolerance; hygromycin-B;
KW abiotic stress tolerance; improved nutritional value; hygromycin; primer;
KW amino acid over production; herbicide resistance; glyphosate resistance;
KW imidazolinone herbicide resistance; sulphonylurea herbicide resistance;
KW porphyrin herbicide resistance; triazine resistance; disease resistance;
KW modified oil production; modified starch production; waxy starch;
KW altered floral morphology; male-sterile plant; albino mutant;
KW modified fatty acid content; reduced palmitate production; albino plant;
KW increased stearate production; reduced linolenic acid production;
KW photosynthetic process.
XX
XX Zea mays.
OS Synthetic.
OS
XX
XX WO200192512-A2.
XX
XX 06-DEC-2001.
XX
XX 01-JUN-2001; 2001WO-US017672.
XX
XX 01-JUN-2000; 2000US-0208538P.
XX 30-OCT-2000; 2000US-0244989P.
XX 27-MAR-2001; 2001US-00818875.
XX
XX (UYDE) UNIV DELAWARE.
XX
XX Kmtec EB, Gamper HB, Rice MC, Kim J;
XX WPI, 2002-106307/14.
XX
XX New oligonucleotides with modified nuclease-resistant termini, useful for
XX creating plants with desired phenotypes, e.g. stress tolerance, improved
XX nutritional value, herbicide or disease resistance, or modified oil
XX production.
XX
XX Claim 7; Page 80; 220pp; English.
XX
XX The invention relates to an oligonucleotide for targeted alteration of a
XX genetic sequence, which comprises a single-stranded oligonucleotide
XX having a DNA domain. The DNA domain has at least one mismatch with
XX respect to the genetic sequence to be altered and further comprises
XX chemical modifications of the oligonucleotide. The chemical modifications
XX consist of o-methyl modification, an LNA modification, two or more
XX phosphorothioate linkages on a terminus, or a combination of any two or
XX more of these modifications. The oligonucleotides are useful for
XX directing repair or alteration of plant genetic information. The
XX oligonucleotides are particularly useful for creating plants with desired
XX phenotypes, e.g. environmental or abiotic stress tolerance, improved
XX nutritional value (e.g. altering amino acid content of plants or
XX conferring amino acid over production), herbicide resistance (e.g.
XX glyphosate resistance, imidazolinone and sulphonylurea herbicide
XX resistance), porphyrin herbicide resistance or triazine resistance),
XX disease resistance, modified oil production, modified starch production
XX (e.g. increased starch or production of waxy starch), altered floral
XX morphology (e.g. male-sterile plants) or modified fatty acid content
XX (e.g. reduced palmitate, increased stearate or reduced linolenic acid).
XX The oligonucleotides are also useful for producing albino mutants for the
XX analysis of photosynthetic processes. This sequence represents a genome

CC altering oligonucleotide of the invention
XX
SQ Sequence 17 BP; 6 A; 2 C; 6 G; 3 T; 0 U; 0 Other;
XX
Query Match 2.8%; Score 11.8; DB 1; Length 17;
Best Local Similarity 86.7%; Pred. No. 56+02;
Matches 13; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
XX
QY 402 GCCTTCTACATGATC 416
XX
Db 16 GCCTTCTACATGATC 2
XX
RESULT 1051
ABK25244
ID ABK25244 standard; DNA; 17 BP.
XX
XX ABK25244;
XX
XX 09-APR-2002 (first entry)
XX
XX Male-sterile plant producing genome altering oligonucleotide #144.
XX
KW Chromosomal genomic alteration; genome altering oligonucleotide; PCR; ss;
KW o-methyl modification; LNA modification; phosphorothioate linkage;
KW DNA repair; DNA alteration; environmental tolerance; hygromycin-B;
KW abiotic stress tolerance; improved nutritional value; hygromycin; primer;
KW amino acid over production; herbicide resistance; glyphosate resistance;
KW imidazolinone herbicide resistance; sulphonylurea herbicide resistance;
KW porphyrin herbicide resistance; triazine resistance; disease resistance;
KW modified oil production; modified starch production; waxy starch;
KW altered floral morphology; male-sterile plant; albino mutant;
KW modified fatty acid content; reduced palmitate production; albino plant;
KW increased stearate production; reduced linolenic acid production;
KW photosynthetic process.
XX
XX Trifolium aestivum.
OS Synthetic.
OS
XX
XX WO200192512-A2.
XX
XX 06-DEC-2001.
XX
XX 01-JUN-2001; 2001WO-US017672.
XX
XX 01-JUN-2000; 2000US-0208538P.
XX 30-OCT-2000; 2000US-0244989P.
XX 27-MAR-2001; 2001US-00818875.
XX
XX (UYDE) UNIV DELAWARE.
XX
XX Kmtec EB, Gamper HB, Rice MC, Kim J;
XX WPI, 2002-106307/14.
XX
XX New oligonucleotides with modified nuclease-resistant termini, useful for
XX creating plants with desired phenotypes, e.g. stress tolerance, improved
XX nutritional value, herbicide or disease resistance, or modified oil
XX production.
XX
XX Claim 7; Page 79; 220pp; English.
XX
XX The invention relates to an oligonucleotide for targeted alteration of a
XX genetic sequence, which comprises a single-stranded oligonucleotide
XX having a DNA domain. The DNA domain has at least one mismatch with
XX respect to the genetic sequence to be altered and further comprises
XX chemical modifications of the oligonucleotide. The chemical modifications
XX consist of o-methyl modification, an LNA modification, two or more
XX phosphorothioate linkages on a terminus, or a combination of any two or
XX more of these modifications. The oligonucleotides are useful for
XX directing repair or alteration of plant genetic information. The
XX oligonucleotides are particularly useful for creating plants with desired
XX phenotypes, e.g. environmental or abiotic stress tolerance, improved

CC nutritional value (e.g. altering amino acid content of plants or
 CC conferring amino acid over production), herbicide resistance (e.g.
 CC glyphosate resistance, imidazolinone and sulphonylurea herbicide),
 CC resistance, porphyritic herbicide resistance or triazine resistance),
 CC disease resistance, modified oil production, modified starch production
 CC (e.g. increased starch or production of waxy starch), altered floral
 CC morphology (e.g. male-sterile plants) or modified fatty acid content
 CC (e.g. reduced palmitate, increased stearate or reduced linoleic acid).
 CC The oligonucleotides are also useful for producing albino mutants for the
 CC analysis of photosynthetic processes. This sequence represents a genome
 CC altering oligonucleotide of the invention
 CC
 XX
 SQ Sequence 17 BP; 3 A; 7 C; 2 G; 5 T; 0 U; 0 Other;

Query Match 2.8%; Score 11.8; DB 1; Length 17;
 Best Local Similarity 86.7%; Pred. No. 5e+02;
 Matches 13; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
 QY 402 GCTCTTACGTATC 416
 DB 2 GCCTCTACATGATC 16

RESULT 1052
 ID ABA81930 standard; DNA; 17 BP.
 AC ABA81930;
 XX
 DT 25-JAN-2002 (first entry)
 XX
 DE Rat G-protein serotonin receptor PCR primer #26.
 XX
 KW Microorganism detection; capture oligonucleotide; probe; cancer; biochip;
 KW polymorphism detection; genetic disease diagnosis; microarray;
 KW PCR primer; ss.
 XX
 OS Rattus sp.
 XX
 PN WO200177372-A2.
 PD 18-OCT-2001.
 XX
 PF 26-MAR-2001; 2001WO-BE000053.
 XX
 PR 24-MAR-2000; 2000EP-00870055.
 PR 15-SEP-2000; 2000EP-00870204.
 XX
 PA (UYN0-) UNIV NOTRE-DAME DE LA PAIX.
 XX
 PI Remacle J, Hamels S, Zammaleto N, Lockman L, Dufour S;
 PI Alexandre I, De Longueville F;
 DR WPI; 2002-010921/01.
 XX
 PT Identifying or quantifying organisms or genes, useful e.g. for diagnosis,
 PT by detecting specific nucleotide sequences present among several
 PT homologous sequences.
 XX
 PS Example 12; Page 39; 56pp; English.
 XX
 CC The present invention provides a method of identifying or quantitating a
 CC microorganism in a sample by detecting its nucleotide sequence from
 CC amongst homologous sequences. The method can be used to detect
 CC microorganisms and polymorphisms, and to diagnosis genetic diseases
 CC including cancer. The present sequence is a PCR primer used in the
 CC exemplification of the invention
 CC
 XX
 SQ Sequence 17 BP; 0 A; 5 C; 5 G; 7 T; 0 U; 0 Other;

Query Match 2.8%; Score 11.8; DB 1; Length 17;
 Best Local Similarity 86.7%; Pred. No. 5e+02;
 Matches 13; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 240 GGCTGCTCCGGGC 254
 DB 3 GGCTGCTTCCGATC 17

RESULT 1053
 ID ABA79110 standard; DNA; 17 BP.
 AC ABA79110;
 XX
 DT 03-JAN-2003 (first entry)
 XX
 DE Human HTPL scanning oligonucleotide SEQ ID 356.
 XX
 KW Human; gene therapy; tumour suppressor; HTPL; chromosome 10p12.1;
 KW human testis expressed Patched like protein; testis; adrenal; liver;
 KW male germ cell development; bone marrow; brain; kidney; lung; placenta;
 KW prostate; skeletal muscle; colon; male infertility; cancer; ss.
 XX
 OS Homo sapiens.
 XX
 PN EP1229046-A2.
 PD 07-AUG-2002.
 XX
 PF 28-JAN-2002; 2002EP-00001167.
 XX
 PR 30-JAN-2001; 2001WO-US0000663.
 PR 30-JAN-2001; 2001WO-US0000664.
 PR 30-JAN-2001; 2001WO-US0000665.
 PR 30-JAN-2001; 2001WO-US0000667.
 PR 30-JAN-2001; 2001WO-US0000668.
 PR 30-JAN-2001; 2001WO-US0000669.
 PR 23-MAY-2001; 2001US-00864761.
 PR 09-OCT-2001; 2001US-0327698P.
 XX
 PA (AEOM-) AEOMICA INC.
 XX
 PI Zhan J;
 DR WPI; 2002-676582/73.
 XX
 PT Novel isolated human testis expressed Patched like protein (HTPL), useful
 PT for identifying agonist and antagonist and specific binding partners, and
 PT for treating subjects having defects in HTPL.
 XX
 PS Example 2; Page 110; 718pp; English.
 XX

CC The present invention relates to human testis expressed Patched like
 CC protein (HTPL, see ABA78759 to ABA78762 and ABA98519 to ABA98520). HTPL
 CC has two isoforms, with a few single base pair differences between the
 CC two. One of the single base pair changes introduces a premature stop
 CC codon in HTPL-S (S for short) compared to HTPL-L (L for long). HTPL
 CC shares an overall structure organisation with the Patched protein. The
 CC shared structural features strongly imply that HTPL plays a role similar
 CC to that of Patched, and is a potential tumour suppressor. HTPL is
 CC important in regulating male germ cell development, and the HTPL gene was
 CC mapped to human chromosome 10p12.1. HTPL and its coding sequence are
 CC useful for diagnosing a disorder caused by mutation in HTPL, and in
 CC therapy and manufacture of a medicament for treatment or prevention of
 CC such disorder associated with decreased expression or activity of human
 CC HTPL. Such disorders include disorders of testis, or adrenal, adult and
 CC foetal liver, bone marrow, brain, kidney, lung, placenta, prostate,
 CC skeletal muscle or colon function. HTPL proteins and nucleic acids are
 CC clinically useful diagnostic markers and potential therapeutic agents for
 CC male infertility and cancer. The present oligonucleotide was used in an
 CC example from the invention
 CC
 XX
 SQ Sequence 17 BP; 1 A; 7 C; 6 G; 3 T; 0 U; 0 Other;

Query Match 2.8%; Score 11.8; DB 1; Length 17;
 Best Local Similarity 86.7%; Pred. No. 5e+02;
 Matches 13; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

XX SQ Sequence 17 BP; 4 A; 7 C; 3 G; 3 T; 0 U; 0 Other;
 Query Match 2.8%; Score 11.8; DB 1; Length 17;
 Best Local Similarity 86.7%; Pred. No. 5e+02;
 Matches 13; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 353 CTACAGCGACTTCT 367
 1 CTACAGCGACTTCT 15

Db 1 CTACAGCGACTTCT 15

RESULT 1056
 ABV79553/C
 ID ABV79553 standard; DNA; 17 BP.
 AC ABV79553;
 XX
 XX 03-JAN-2003 (first entry)
 DT
 DE Human HTPL scanning oligonucleotide SEQ ID 799.
 XX
 XX Human; gene therapy; tumour suppressor; HTPL; chromosome 10p12.1;
 KW human testis expressed Patched like protein; testis; adrenal; liver;
 KW male germ cell development; bone marrow; brain; kidney; lung; placenta;
 KW prostate; skeletal muscle; colon; male infertility; cancer; ss.
 XX
 OS Homo sapiens.
 XX
 XX EP1229046-A2.
 XX
 XX 07-AUG-2002.
 PD
 PF 28-JAN-2002; 2002EP-00001167.
 XX
 XX 30-JAN-2001; 2001WO-US000663.
 PR
 PR 30-JAN-2001; 2001WO-US000664.
 PR
 PR 30-JAN-2001; 2001WO-US000665.
 PR
 PR 30-JAN-2001; 2001WO-US000667.
 PR
 PR 30-JAN-2001; 2001WO-US000668.
 PR
 PR 30-JAN-2001; 2001WO-US000669.
 PR
 PR 23-MAY-2001; 2001US-00864761.
 PR
 PR 09-OCT-2001; 2001US-0327898P.
 XX
 XX (AEOM-) AECOMICA INC.
 XX
 XX Zhan J;
 PI
 DR WPI; 2002-676582/73.
 XX
 XX Novel isolated human testis expressed Patched like protein (HTPL), useful
 PT for identifying agonist and antagonist and specific binding partners, and
 PT for treating subjects having defects in HTPL.
 XX
 XX Example 2; Page 168; 718bp; English.

XX The present invention relates to human testis expressed Patched like
 CC protein (HTPL, see ABV78759 to ABV78762 and ABB98519 to ABB98520). HTPL
 CC has two isoforms, with a few single base pair differences between the
 CC two. One of the single base pair changes introduces a premature stop
 CC codon in HTPL-S (S for short) compared to HTPL-L (L for long). HTPL
 CC shares an overall structure organisation with the Patched protein. The
 CC shared structural features strongly imply that HTPL plays a role similar
 CC to that of Patched, and is a potential tumour suppressor. HTPL is
 CC important in regulating male germ cell development, and the HTPL gene was
 CC mapped to human chromosome 10p12.1. HTPL and its coding sequence are
 CC useful for diagnosing a disorder caused by mutation in HTPL, and in
 CC therapy and manufacture of a medicament for treatment or prevention of
 CC such disorder associated with decreased expression or activity of human
 CC HTPL. Such disorders include disorders of testis, or adrenal, adult and
 CC foetal liver, bone marrow, brain, kidney, lung, placenta, prostate,
 CC skeletal muscle or colon function. HTPL proteins and nucleic acids are
 CC clinically useful diagnostic markers and potential therapeutic agents for

CC male infertility and cancer. The present oligonucleotide was used in an
 CC example from the invention
 CC
 XX SQ Sequence 17 BP; 2 A; 5 C; 8 G; 2 T; 0 U; 0 Other;
 Query Match 2.8%; Score 11.8; DB 1; Length 17;
 Best Local Similarity 86.7%; Pred. No. 5e+02;
 Matches 13; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 373 TCCTGACCGCGACG 387
 15 TCCTGACCGCGCGG 1

Db 15 TCCTGACCGCGCGG 1

RESULT 1057
 ABV78972/C
 ID ABV78972 standard; DNA; 17 BP.
 AC ABV78972;
 XX
 XX 03-JAN-2003 (first entry)
 DT
 DE Human HTPL scanning oligonucleotide SEQ ID 218.
 XX
 XX Human; gene therapy; tumour suppressor; HTPL; chromosome 10p12.1;
 KW human testis expressed Patched like protein; testis; adrenal; liver;
 KW male germ cell development; bone marrow; brain; kidney; lung; placenta;
 KW prostate; skeletal muscle; colon; male infertility; cancer; ss.
 XX
 OS Homo sapiens.
 XX
 XX EP1229046-A2.
 XX
 XX 07-AUG-2002.
 PD
 PF 28-JAN-2002; 2002EP-00001167.
 XX
 XX 30-JAN-2001; 2001WO-US000663.
 PR
 PR 30-JAN-2001; 2001WO-US000664.
 PR
 PR 30-JAN-2001; 2001WO-US000665.
 PR
 PR 30-JAN-2001; 2001WO-US000667.
 PR
 PR 30-JAN-2001; 2001WO-US000668.
 PR
 PR 30-JAN-2001; 2001WO-US000669.
 PR
 PR 23-MAY-2001; 2001US-00864761.
 PR
 PR 09-OCT-2001; 2001US-0327898P.
 XX
 XX (AEOM-) AECOMICA INC.
 XX
 XX Zhan J;
 PI
 DR WPI; 2002-676582/73.
 XX
 XX Novel isolated human testis expressed Patched like protein (HTPL), useful
 PT for identifying agonist and antagonist and specific binding partners, and
 PT for treating subjects having defects in HTPL.
 XX
 XX Example 2; Page 92; 718bp; English.

XX The present invention relates to human testis expressed Patched like
 CC protein (HTPL, see ABV78759 to ABV78762 and ABB98519 to ABB98520). HTPL
 CC has two isoforms, with a few single base pair differences between the
 CC two. One of the single base pair changes introduces a premature stop
 CC codon in HTPL-S (S for short) compared to HTPL-L (L for long). HTPL
 CC shares an overall structure organisation with the Patched protein. The
 CC shared structural features strongly imply that HTPL plays a role similar
 CC to that of Patched, and is a potential tumour suppressor. HTPL is
 CC important in regulating male germ cell development, and the HTPL gene was
 CC mapped to human chromosome 10p12.1. HTPL and its coding sequence are
 CC useful for diagnosing a disorder caused by mutation in HTPL, and in
 CC therapy and manufacture of a medicament for treatment or prevention of
 CC such disorder associated with decreased expression or activity of human
 CC HTPL. Such disorders include disorders of testis, or adrenal, adult and
 CC foetal liver, bone marrow, brain, kidney, lung, placenta, prostate,

CC skeletal muscle or colon function. HTP, proteins and nucleic acids are
 CC clinically useful diagnostic markers and potential therapeutic agents for
 CC male infertility and cancer. The present oligonucleotide was used in an
 CC example from the invention
 XX
 SQ Sequence 17 BP; 4 A; 9 C; 4 G; 0 T; 0 U; 0 Other;

Query Match 2.8%; Score 11.8; DB 1; Length 17;
 Best Local Similarity 86.7%; Pred. No. 5e+02; Mismatches 2; Indels 0; Gaps 0;
 Matches 13; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 236 GGGAGGCTGCTTCCC 250
 Db 15 GGGTGGCTGCTTCCC 1

RESULT 1058
 ID ABV79497 standard; DNA; 17 BP.
 XX
 AC ABV79497;
 XX
 DT 03-JAN-2003 (first entry)
 XX

Human HTP, scanning oligonucleotide SEQ ID 743.

XX Human; gene therapy; tumour suppressor; HTP, chromosome 10p12.1;
 KW human testis expressed Patched like protein; testis; adrenal; liver;
 KW male germ cell development; bone marrow; brain; kidney; lung; placenta;
 KW prostate; skeletal muscle; colon; male infertility; cancer; ss.
 XX

OS Homo sapiens.

PN EPI229046-A2.

PD 07-AUG-2002.

PE 28-JAN-2002; 2002EP-00001167.

PR 30-JAN-2001; 2001WO-US000663.

PR 30-JAN-2001; 2001WO-US000664.

PR 30-JAN-2001; 2001WO-US000665.

PR 30-JAN-2001; 2001WO-US000667.

PR 30-JAN-2001; 2001WO-US000668.

PR 23-MAY-2001; 2001US-00864761.

PR 09-OCT-2001; 2001US-0327898P.

PA (AEOM-) AEWICA INC.

PI Zhan J;

PI WPI; 2002-676582/73.

PT Novel isolated human testis expressed Patched like protein (HTPL), useful
 PT for identifying agonist and antagonist and specific binding partners, and
 PT for treating subjects having defects in HTP.

PS Example 2; Page 161; 718pp; English.

XX The present invention relates to human testis expressed Patched like
 CC protein (HTPL, see ABV78759 to ABV78762 and AB898519 to AB898520). HTP
 CC has two isoforms, with a few single base pair differences between the
 CC two. One of the single base pair changes introduces a premature stop
 CC codon in HTP-L (S for short) compared to HTP-L (L for long). HTP
 CC shares an overall structure organisation with the Patched protein. The
 CC shared structural features strongly imply that HTP plays a role similar
 CC to that of Patched, and is a potential tumour suppressor. HTP is
 CC important in regulating male germ cell development, and the HTP gene was
 CC mapped to human chromosome 10p12.1. HTP and its coding sequence are
 CC useful for diagnosing a disorder caused by mutation in HTP, and in
 CC therapy and manufacture of a medicament for treatment or prevention of
 CC such disorder associated with decreased expression or activity of human

CC HTP. Such disorders include disorders of testis, or adrenal, adult and
 CC foetal liver, bone marrow, brain, kidney, lung, placenta, prostate,
 CC skeletal muscle or colon function. HTP, proteins and nucleic acids are
 CC clinically useful diagnostic markers and potential therapeutic agents for
 CC male infertility and cancer. The present oligonucleotide was used in an
 CC example from the invention
 XX

QY Sequence 17 BP; 4 A; 7 C; 2 G; 4 T; 0 U; 0 Other;
 Query Match 2.8%; Score 11.8; DB 1; Length 17;
 Best Local Similarity 86.7%; Pred. No. 5e+02; Mismatches 2; Indels 0; Gaps 0;
 Matches 13; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 353 CTACAGCGACTTCT 367
 Db 3 CTACAGCGACTTCT 17

RESULT 1059
 ID ABV79106 standard; DNA; 17 BP.
 XX
 AC ABV79106;
 XX
 DT 03-JAN-2003 (first entry)
 XX

Human HTP, scanning oligonucleotide SEQ ID 352.

XX Human; gene therapy; tumour suppressor; HTP, chromosome 10p12.1;
 KW human testis expressed Patched like protein; testis; adrenal; liver;
 KW male germ cell development; bone marrow; brain; kidney; lung; placenta;
 KW prostate; skeletal muscle; colon; male infertility; cancer; ss.
 XX

OS Homo sapiens.

PN EPI229046-A2.

PD 07-AUG-2002.

PE 28-JAN-2002; 2002EP-00001167.

PR 30-JAN-2001; 2001WO-US000663.

PR 30-JAN-2001; 2001WO-US000664.

PR 30-JAN-2001; 2001WO-US000665.

PR 30-JAN-2001; 2001WO-US000667.

PR 30-JAN-2001; 2001WO-US000668.

PR 23-MAY-2001; 2001US-00864761.

PR 09-OCT-2001; 2001US-0327898P.

PA (AEOM-) AEWICA INC.

PI Zhan J;

PI WPI; 2002-676582/73.

PT Novel isolated human testis expressed Patched like protein (HTPL), useful
 PT for identifying agonist and antagonist and specific binding partners, and
 PT for treating subjects having defects in HTP.

PS Example 2; Page 109; 718pp; English.

XX The present invention relates to human testis expressed Patched like
 CC protein (HTPL, see ABV78759 to ABV78762 and AB898519 to AB898520). HTP
 CC has two isoforms, with a few single base pair differences between the
 CC two. One of the single base pair changes introduces a premature stop
 CC codon in HTP-L (S for short) compared to HTP-L (L for long). HTP
 CC shares an overall structure organisation with the Patched protein. The
 CC shared structural features strongly imply that HTP plays a role similar
 CC to that of Patched, and is a potential tumour suppressor. HTP is
 CC important in regulating male germ cell development, and the HTP gene was
 CC mapped to human chromosome 10p12.1. HTP and its coding sequence are
 CC useful for diagnosing a disorder caused by mutation in HTP, and in

CC therapy and manufacture of a medicament for treatment or prevention of
 CC such disorder associated with decreased expression or activity of human
 CC HTPPL. Such disorders include disorders of testis, or adrenal, adult and
 CC foetal liver, bone marrow, brain, kidney, lung, placenta, prostate,
 CC skeletal muscle or colon function. HTPPL proteins and nucleic acids are
 CC clinically useful diagnostic markers and potential therapeutic agents for
 CC male infertility and cancer. The present oligonucleotide was used in an
 CC example from the invention

XX Sequence 17 BP; 1 A; 9 C; 5 G; 2 T; 0 U; 0 Other;

Query Match 2.8%; Score 11.8; DB 1; Length 17;

Best Local Similarity 86.7%; Pred. No. 5e+02; 2; Indels 0; Gaps 0;

Matches 13; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

136 CCGGCTGCGGCTGG 150

3 CCGGCTGCGGCTGG 17

RESULT 1060

ABV78971/c

ID ABV78971 standard; DNA; 17 BP.

AC ABV78971;

XX 03-JAN-2003 (first entry)

DE Human HTPPL scanning oligonucleotide SEQ ID 217.

XX Human; gene therapy; tumour suppressor; HTPPL; chromosome 10p12.1;

XX human testis expressed Patched like protein; testis; adrenal; liver;

XX male germ cell development; bone marrow; brain; kidney; lung; placenta;

XX prostate; skeletal muscle; colon; male infertility; cancer; ss.

OS Homo sapiens.

XX EPI229046-A2.

XX 07-AUG-2002.

XX 28-JAN-2002; 2002BP-00001167.

XX 30-JAN-2001; 2001WO-US000663.

XX 30-JAN-2001; 2001WO-US000664.

XX 30-JAN-2001; 2001WO-US000665.

XX 30-JAN-2001; 2001WO-US000667.

XX 30-JAN-2001; 2001WO-US000668.

XX 30-JAN-2001; 2001US-00864761.

XX 09-OCT-2001; 2001US-0327898P.

XX (AEOM-) AEOMICA INC.

XX Zhan J;

XX WPI; 2002-676582/73.

XX Novel isolated human testis expressed Patched like protein (HTPL), useful
 CC for identifying agonist and antagonist and specific binding partners, and
 CC for treating subjects having defects in HTPPL.

XX Example 2; Page 92; 718pp; English.

CC mapped to human chromosome 10p12.1. HTPPL and its coding sequence are
 CC useful for diagnosing a disorder caused by mutation in HTPPL, and in
 CC therapy and manufacture of a medicament for treatment or prevention of
 CC such disorder associated with decreased expression or activity of human
 CC HTPPL. Such disorders include disorders of testis, or adrenal, adult and
 CC foetal liver, bone marrow, brain, kidney, lung, placenta, prostate,
 CC skeletal muscle or colon function. HTPPL proteins and nucleic acids are
 CC clinically useful diagnostic markers and potential therapeutic agents for
 CC male infertility and cancer. The present oligonucleotide was used in an
 CC example from the invention

XX Sequence 17 BP; 5 A; 8 C; 4 G; 0 T; 0 U; 0 Other;

Query Match 2.8%; Score 11.8; DB 1; Length 17;

Best Local Similarity 86.7%; Pred. No. 5e+02; 2; Indels 0; Gaps 0;

Matches 13; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

236 GGGAGGCTGCTTCCC 250

16 GGGAGGCTGCTTCCC 2

RESULT 1061

ABV79498

ID ABV79498 standard; DNA; 17 BP.

AC ABV79498;

XX 03-JAN-2003 (first entry)

DE Human HTPPL scanning oligonucleotide SEQ ID 744.

XX Human; gene therapy; tumour suppressor; HTPPL; chromosome 10p12.1;

XX human testis expressed Patched like protein; testis; adrenal; liver;

XX male germ cell development; bone marrow; brain; kidney; lung; placenta;

XX prostate; skeletal muscle; colon; male infertility; cancer; ss.

OS Homo sapiens.

XX EPI229046-A2.

XX 07-AUG-2002.

XX 28-JAN-2002; 2002BP-00001167.

XX 30-JAN-2001; 2001WO-US000663.

XX 30-JAN-2001; 2001WO-US000664.

XX 30-JAN-2001; 2001WO-US000665.

XX 30-JAN-2001; 2001WO-US000667.

XX 30-JAN-2001; 2001WO-US000668.

XX 30-JAN-2001; 2001US-00864761.

XX 09-OCT-2001; 2001US-0327898P.

XX (AEOM-) AEOMICA INC.

XX Zhan J;

XX WPI; 2002-676582/73.

XX Novel isolated human testis expressed Patched like protein (HTPL), useful
 CC for identifying agonist and antagonist and specific binding partners, and
 CC for treating subjects having defects in HTPPL.

XX Example 2; Page 161; 718pp; English.

CC to that of Patched, and is a potential tumour suppressor. HTP1 is
CC important in regulating male germ cell development, and the HTP1 gene was
CC mapped to human chromosome 10p12.1. HTP1 and its coding sequence are
CC useful for diagnosing a disorder caused by mutation in HTP1, and in
CC therapy and manufacture of a medicament for treatment or prevention of
CC such disorder associated with decreased expression or activity of human
CC HTP1. Such disorders include disorders of testis, or adrenal, adult and
CC foetal liver, bone marrow, brain, kidney, lung, placenta, prostate,
CC skeletal muscle or colon function. HTP1 proteins and nucleic acids are
CC clinically useful diagnostic markers and potential therapeutic agents for
CC male infertility and cancer. The present oligonucleotide was used in an
CC example from the invention

XX SQ Sequence 17 BP; 4 A; 7 C; 3 G; 3 T; 0 U; 0 Other;

Query Match 2.8%; Score 11.8; DB 1; Length 17;
Best Local Similarity 86.7%; Pred. No. 5e+02; Mismatches 0; Gaps 0;
Matches 13; Conservative 0; Indels 2; Indels 0; Gaps 0;

Qy 353 CTACAGCAGCTTCCT 367
Db 2 CTACAGCAGCTTCCT 16

RESULT 1062
ABV79552/C
ID ABV79552 standard; DNA; 17 BP.
XX AC ABV79552;
XX DT 03-JAN-2003 (first entry)

XX Human HTP1 scanning oligonucleotide SEQ ID 798.

XX Human; gene therapy; tumour suppressor; HTP1; chromosome 10p12.1;
XX human testis expressed Patched like protein; testis; adrenal; liver;
XX male germ cell development; bone marrow; brain; kidney; lung; placenta;
XX prostate; skeletal muscle; colon; male infertility; cancer; ss.
XX OS Homo sapiens.
XX PN EP1229046-A2.
XX PD 07-AUG-2002.
XX PF 28-JAN-2002; 2002EP-00001167.
XX PR 30-JAN-2001; 2001WO-US000663.
XX PR 30-JAN-2001; 2001WO-US000664.
XX PR 30-JAN-2001; 2001WO-US000665.
XX PR 30-JAN-2001; 2001WO-US000667.
XX PR 30-JAN-2001; 2001WO-US000668.
XX PR 30-JAN-2001; 2001WO-US000669.
XX PR 23-MAY-2001; 2001US-00864761.
XX PR 09-OCT-2001; 2001US-0327898P.
XX PA (ABOM-) ABOmica INC.
XX PI Zhan J;
XX DR WPI; 2002-676582/73.
XX PT Novel isolated human testis expressed Patched like protein (HTP1), useful
XX for identifying agonist and antagonist and specific binding partners, and
XX for treating subjects having defects in HTP1.
XX PS Example 2; Page 168; 718pp; English.

XX The present invention relates to human testis expressed Patched like
XX protein (HTP1), see ABV78759 to ABV78762 and AB398519 to AB398520). HTP1
XX has two isoforms, with a few single base pair differences between the
XX two. One of the single base pair changes introduces a premature stop
XX codon in HTP1-S (S for short) compared to HTP1-L (L for long). HTP1

CC shares an overall structure organisation with the Patched protein. The
CC shared structural features strongly imply that HTP1 plays a role similar
CC to that of Patched, and is a potential tumour suppressor. HTP1 is
CC important in regulating male germ cell development, and the HTP1 gene was
CC mapped to human chromosome 10p12.1. HTP1 and its coding sequence are
CC useful for diagnosing a disorder caused by mutation in HTP1, and in
CC therapy and manufacture of a medicament for treatment or prevention of
CC such disorder associated with decreased expression or activity of human
CC HTP1. Such disorders include disorders of testis, or adrenal, adult and
CC foetal liver, bone marrow, brain, kidney, lung, placenta, prostate,
CC skeletal muscle or colon function. HTP1 proteins and nucleic acids are
CC clinically useful diagnostic markers and potential therapeutic agents for
CC male infertility and cancer. The present oligonucleotide was used in an
CC example from the invention

XX SQ Sequence 17 BP; 3 A; 4 C; 8 G; 2 T; 0 U; 0 Other;

Query Match 2.8%; Score 11.8; DB 1; Length 17;
Best Local Similarity 86.7%; Pred. No. 5e+02; Mismatches 0; Gaps 0;
Matches 13; Conservative 0; Indels 2; Indels 0; Gaps 0;

Qy 373 TCCTGACCGCGACG 387
Db 16 TCCTGACCGCGCGG 2

RESULT 1063
ABK18724
ID ABK18724 standard; RNA; 17 BP.
XX AC ABK18724;
XX DT 09-APR-2002 (first entry)

XX Human ERG DNAzyme target sequence Seq ID No 1371.

XX Human; hamsterhead ribozyme; cytosolic; antitumour; antidiabetic;
XX ophthalmological; antiarthritic; antipsoriatic; vitruclide; osteopathic;
XX vulnary; cancer; lymphoma; Bwing's sarcoma; melanoma; psoriasis;
XX tumour angiogenesis; diabetic retinopathy; macular degeneration;
XX neovascular glaucoma; myopic degeneration; arthritis; verruca vulgaris;
XX angiodioma of tuberous sclerosis; port-wine stain; wound healing;
XX Sturge Weber syndrome; Kippel-Trenauay-Weber syndrome; leukaemia; ss;
XX Oeler-Weber-rendu syndrome; leukaemia; osteoporosis; DNAzyme; inozyme;
XX amberyne.
XX OS Homo sapiens.
XX PN WO200188124-A2.
XX PD 22-NOV-2001.
XX PR 16-MAY-2001; 2001WO-US015866.
XX PR 16-MAY-2000; 2000US-00572021.
XX PA (RIBO-) RIBOZYME PHARM INC.
XX PA (GLAX) GLAXO GROUP LTD.
XX PI Jarvis T, Von Carlowitz I, Mcswigen JA, McLaughlin F, Randi AM;
XX DR WPI; 2002-082995/11.
XX PT Novel polynucleotide which down regulates expression of Ets-related gene,
XX useful for treating cancer, diabetic retinopathy, macular degeneration,
XX arthritis, psoriasis, verruca vulgaris and Sturge Weber syndrome.
XX PS Claim 4; Page 89; 149pp; English.

XX The invention relates to a nucleic acid molecule (I) which down regulates
XX expression of an Ets-related gene (ERG). (I) is useful for treating
XX conditions selected from cancer, lymphoma, Bwing's sarcoma, melanoma,
XX tumour angiogenesis, diabetic retinopathy, macular degeneration,

CC neovascular glaucoma, myopic degeneration, arthritis, psoriasis, verruca
 CC vulgaris, angiofibroma of tuberous sclerosis, port-wine stains, Sturge
 CC Weber syndrome, Kippel-Trenunay-Weber syndrome, Osler-Weber-rendu
 CC syndrome, leukaemia, osteoporosis and wound healing. (I) is useful for
 CC treating a patient having a condition associated with the level of ERG,
 CC by contacting cells of the patient with (I) under conditions suitable for
 CC the treatment. The method comprises the use of one or more therapies
 CC under conditions suitable for the treatment. Leukaemia or tumour
 CC angiogenesis is treated by administering (I) to the patient in
 CC conjunction with one or more of other therapies such as radiation or
 CC chemotherapy treatment. (I) is useful for reducing ERG activity in a
 CC cell, by contacting the cell with (I). (I) is useful for cleaving RNA of
 CC ERG gene, by contacting (I) with RNA, in the presence of a divalent
 CC cation such as Mg²⁺. (I) is useful for diagnosis of conditions and
 CC diseases related to the expression of ERG, and as diagnostic tool to
 CC examine genetic drift and mutations within diseased cells or to detect
 CC the presence of ERG RNA in a cell. (I) is useful for specifically
 CC targeting genes that share homology with ERG gene or ERG fusion genes.
 CC ABK17354-ABK22719 represent nucleic acids, including antisense and
 CC enzymatic nucleic acid molecules which regulate expression of ERG, and
 CC related PCR primers of the invention

SO Sequence 17 BP; 3 A; 7 C; 6 G; 0 T; 1 U; 0 Other;

Query Match 2.8%; Score 11.8; DB 1; Length 17;
 Best Local Similarity 86.7%; Pred. No. 5e+02;
 Matches 13; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

OY 383 CGACGACGGCCCAA 397
 DB 1 CGACGACGGCCCAA 15

RESULT 1064
 ABK19125
 ID ABK19125 standard; RNA; 17 BP.
 XX
 AC ABK19125;
 XX
 DT 09-APR-2002 (first entry)

Human ERG Amberzyme target sequence Seq ID No 1772.

Human; hammerhead ribozyme; cytosolic; antitumour; antidiabetic;
 XX ophthalmological; antiarthritic; antipsoriatic; vitinocide; osteopathic;
 XX vulnarary; cancer; lymphoma; Ewing's sarcoma; melanoma; psoriasis;
 XX tumour angiogenesis; diabetic retinopathy; macular degeneration;
 XX neovascular glaucoma; myopic degeneration; arthritis; verruca vulgaris;
 XX angiofibroma of tuberous sclerosis; port-wine stain; wound healing;
 XX Sturge Weber syndrome; Kippel-Trenunay-Weber syndrome; leukaemia; ss;
 XX Osler-Weber-rendu syndrome; leukaemia; osteoporosis; DNAzyme; inozyme;
 XX amberzyme.

OS Homo sapiens.
 XX
 PN WO200186124-A2.
 XX
 PD 22-NOV-2001.
 XX
 PF 16-MAY-2001; 2001WO-US015866.
 XX
 PR 16-MAY-2000; 2000US-00572021.
 XX
 PA (RIBO-) RIBOZYME PHARM INC.
 XX (GLAX) GLAXO GROUP LTD.
 XX
 PI Jarvis T, Von Carlowitz I, Mcswigen JA, McLaughlin F, Randi AM;
 XX WPI, 2002-082995/11.
 DR
 XX Novel polynucleotide which down regulates expression of Ets-related gene,
 PT useful for treating cancer, diabetic retinopathy, macular degeneration,
 PT arthritis, psoriasis, verruca vulgaris and Sturge Weber syndrome.

XX
 PS Claim 4; Page 120; 149pp; English.
 XX
 CC The invention relates to a nucleic acid molecule (I) which down regulates
 CC expression of an Ets-related gene (ERG). (I) is useful for treating
 CC conditions selected from cancer, lymphoma, Ewing's sarcoma, melanoma,
 CC tumour angiogenesis, diabetic retinopathy, macular degeneration,
 CC neovascular glaucoma, myopic degeneration, arthritis, psoriasis, Sturge
 CC vulgaris, angiofibroma of tuberous sclerosis, port-wine stains, Sturge
 CC Weber syndrome, Kippel-Trenunay-Weber syndrome, Osler-Weber-rendu
 CC syndrome, leukaemia, osteoporosis and wound healing. (I) is useful for
 CC treating a patient having a condition associated with the level of ERG,
 CC by contacting cells of the patient with (I) under conditions suitable for
 CC the treatment. The method comprises the use of one or more therapies
 CC under conditions suitable for the treatment. Leukaemia or tumour
 CC angiogenesis is treated by administering (I) to the patient in
 CC conjunction with one or more of other therapies such as radiation or
 CC chemotherapy treatment. (I) is useful for reducing ERG activity in a
 CC cell, by contacting the cell with (I). (I) is useful for cleaving RNA of
 CC ERG gene, by contacting (I) with RNA, in the presence of a divalent
 CC cation such as Mg²⁺. (I) is useful for diagnosis of conditions and
 CC diseases related to the expression of ERG, and as diagnostic tool to
 CC examine genetic drift and mutations within diseased cells or to detect
 CC the presence of ERG RNA in a cell. (I) is useful for specifically
 CC targeting genes that share homology with ERG gene or ERG fusion genes.
 CC ABK17354-ABK22719 represent nucleic acids, including antisense and
 CC enzymatic nucleic acid molecules which regulate expression of ERG, and
 CC related PCR primers of the invention

SO Sequence 17 BP; 3 A; 7 C; 6 G; 0 T; 1 U; 0 Other;

Query Match 2.8%; Score 11.8; DB 1; Length 17;
 Best Local Similarity 86.7%; Pred. No. 5e+02;
 Matches 13; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

OY 383 CGACGACGGCCCAA 397
 DB 2 CGACGACGGCCCAA 16

RESULT 1065
 ABK17730/C
 ID ABK17730 standard; RNA; 17 BP.
 XX
 AC ABK17730;
 XX
 DT 09-APR-2002 (first entry)

Human ERG hammerhead ribozyme target sequence, Seq ID No 377.

Human; hammerhead ribozyme; cytosolic; antitumour; antidiabetic;
 XX ophthalmological; antiarthritic; antipsoriatic; vitinocide; osteopathic;
 XX vulnarary; cancer; lymphoma; Ewing's sarcoma; melanoma; psoriasis;
 XX tumour angiogenesis; diabetic retinopathy; macular degeneration;
 XX neovascular glaucoma; myopic degeneration; arthritis; verruca vulgaris;
 XX angiofibroma of tuberous sclerosis; port-wine stain; wound healing;
 XX Sturge Weber syndrome; Kippel-Trenunay-Weber syndrome; leukaemia; ss;
 XX Osler-Weber-rendu syndrome; leukaemia; osteoporosis; DNAzyme; inozyme;
 XX amberzyme.

OS Homo sapiens.
 XX
 PN WO200186124-A2.
 XX
 PD 22-NOV-2001.
 XX
 PF 16-MAY-2001; 2001WO-US015866.
 XX
 PR 16-MAY-2000; 2000US-00572021.
 XX
 PA (RIBO-) RIBOZYME PHARM INC.
 XX (GLAX) GLAXO GROUP LTD.
 XX
 PI Jarvis T, Von Carlowitz I, Mcswigen JA, McLaughlin F, Randi AM;
 XX WPI, 2002-082995/11.
 DR
 XX Novel polynucleotide which down regulates expression of Ets-related gene,
 PT useful for treating cancer, diabetic retinopathy, macular degeneration,
 PT arthritis, psoriasis, verruca vulgaris and Sturge Weber syndrome.

PI Jarvis T, Von Carlowitz I, McSwigen JA, McLaughlin F, Randi AM;
 XX WPI, 2002-082995/11.
 DR Novel polynucleotide which down regulates expression of Ets-related gene,
 XX useful for treating cancer, diabetic retinopathy, macular degeneration,
 PT arthritis, psoriasis, verruca vulgaris and Sturge Weber syndrome.
 XX
 XX Claim 4; Page 65; 149pp; English.
 CC The invention relates to a nucleic acid molecule (I) which down regulates
 CC expression of an Ets-related gene (ERG). (I) is useful for treating
 CC conditions selected from cancer, lymphoma, Ewing's sarcoma, melanoma,
 CC tumour angiogenesis, diabetic retinopathy, macular degeneration,
 CC neovascular glaucoma, myopic degeneration, arthritis, psoriasis, verruca
 CC vulgaris, angiodiroma of tuberous sclerosis, port-wine stains, Sturge
 CC Weber syndrome, Kippel-Trenaunay-Weber syndrome, Osler-Weber-Rendu
 CC syndrome, leukaemia, osteoporosis and wound healing. (I) is useful for
 CC treating a patient having a condition associated with the level of ERG,
 CC by contacting cells of the patient with (I) under conditions suitable for
 CC the treatment. The method comprises the use of one or more therapies
 CC under conditions suitable for the treatment. Leukaemia or tumour
 CC angiogenesis is treated by administering (I) to the patient in
 CC conjunction with one or more of other therapies such as radiation or
 CC chemotherapy treatment. (I) is useful for reducing ERG activity in a
 CC cell, by contacting the cell with (I). (I) is useful for cleaving RNA of
 CC ERG gene, by contacting (I) with RNA, in the presence of a divalent
 CC cation such as Mg²⁺. (I) is useful for diagnosis of conditions and
 CC diseases related to the expression of ERG, and as diagnostic tool to
 CC examine genetic drift and mutations within diseased cells or to detect
 CC the presence of ERG RNA in a cell. (I) is useful for specifically
 CC targeting genes that share homology with ERG gene or ERG fusion genes.
 CC ABK1734-ABK2719 represent nucleic acids, including antisense and
 CC enzymatic nucleic acid molecules which regulate expression of ERG, and
 CC related PCR primers of the invention
 CC
 XX Sequence 17 BP; 1 A; 4 C; 6 G; 0 T; 6 U; 0 Other;
 SQ
 Query Match 2.8%; Score 11.8; DB 1; Length 17;
 Best Local Similarity 86.7%; Pred. No. 5e+02;
 Matches 13; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
 Oy 393 GCCAAGAGCTTTC 407
 Db 15 GCCAAGAGCCATC 1
 RESULT 1066
 ABV91236/C
 ID ABV91236 standard; DNA; 17 BP.
 XX
 AC ABV91236;
 XX
 DT 23-DEC-2002 (first entry)
 XX
 DE Human POSHL1 scanning oligonucleotide SEQ ID NO 1949.
 XX
 KW Human; POSHL 1; SH3 domain; POSH-like signalling protein 1; oncogene;
 KW Rho GTPase; signal transduction; gene expression; cancer; vaccine;
 KW gene therapy; transgenic; ss.
 XX
 OS Homo sapiens.
 XX
 PN EPI239051-A2.
 XX
 PD 11-SEP-2002.
 XX
 PF 28-JAN-2002; 2002EP-00001165.
 XX
 PR 30-JAN-2001; 2001WO-US000663.
 PR 30-JAN-2001; 2001WO-US000664.
 PR 30-JAN-2001; 2001WO-US000665.
 PR 30-JAN-2001; 2001WO-US000666.

PR 30-JAN-2001; 2001WO-US000667.
 PR 30-JAN-2001; 2001WO-US000668.
 PR 30-JAN-2001; 2001WO-US000669.
 PR 30-JAN-2001; 2001WO-US000670.
 PR 23-MAY-2001; 2001US-00864761.
 PR 10-OCT-2001; 2001US-0328205P.
 XX
 PA (AEOM-) AEOMICA INC.
 XX
 PI Shannon M;
 XX
 DR WPI, 2002-684061/74.
 XX
 PT Novel human SH3 domain (POSH)-like signalling protein 1 polypeptide, POSHL
 PT -1, useful for treating disorders associated with decreased expression or
 PT activity of human POSHL1.
 XX
 XX Example 2; SEQ ID NO 1949; 60pp + Sequence Listing; English.
 CC
 CC The invention relates to an isolated SH3 domain (POSH)-like signalling
 CC protein 1 (POSHL 1) polypeptide (II), comprising a sequence of 730 amino
 CC acids (SI, ABA83999), a sequence having 65% sequence identity to (SI),
 CC (SI) having 95% deviations, especially conservative substitutions or a
 CC fragment of the sequences comprising at least 8 contiguous amino acids.
 CC Human POSHL 1 is a proto-oncogene/oncogene product that functions as an
 CC adaptor protein that interacts with Rho family small GTPases as well as
 CC downstream components of the signal transduction pathway. (I) is useful
 CC for identifying a specific binding partner. (I) and nucleic acids (II)
 CC encoding (I) are useful for diagnosing, monitoring disease and treating
 CC caused by altered expression of human POSHL1 including diagnosing and
 CC treating cancer, they useful in the development of vaccines and (II) is
 CC useful in gene therapy. (II) is useful for constructing microarrays which
 CC are useful for measuring and for surveying gene expression and creating
 CC transgenic non-human animals capable of producing the proteins. The
 CC present sequence is that of a scanning oligonucleotide useful in examples
 CC of the invention. Note: The present sequence did not form part of the
 CC printed specification, but is based on sequence information supplied to
 CC Derwent by the European Patent Office
 CC
 XX Sequence 17 BP; 2 A; 3 C; 8 G; 4 T; 0 U; 0 Other;
 SQ
 Query Match 2.8%; Score 11.8; DB 1; Length 17;
 Best Local Similarity 86.7%; Pred. No. 5e+02;
 Matches 13; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
 Oy 92 CATCACCAGCTCTGA 106
 Db 15 CACCACCACGGCTGA 1
 RESULT 1067
 ABV91234/C
 ID ABV91234 standard; DNA; 17 BP.
 XX
 AC ABV91234;
 XX
 DT 23-DEC-2002 (first entry)
 XX
 DE Human POSHL1 scanning oligonucleotide SEQ ID NO 1947.
 XX
 KW Human; POSHL 1; SH3 domain; POSH-like signalling protein 1; oncogene;
 KW Rho GTPase; signal transduction; gene expression; cancer; vaccine;
 KW gene therapy; transgenic; ss.
 XX
 OS Homo sapiens.
 XX
 PN EPI239051-A2.
 XX
 PD 11-SEP-2002.
 XX
 PF 28-JAN-2002; 2002EP-00001165.
 XX
 PR 30-JAN-2001; 2001WO-US000663.

PR 30-JAN-2001; 2001WO-US000664.
 PR 30-JAN-2001; 2001WO-US000665.
 PR 30-JAN-2001; 2001WO-US000666.
 PR 30-JAN-2001; 2001WO-US000667.
 PR 30-JAN-2001; 2001WO-US000668.
 PR 30-JAN-2001; 2001WO-US000669.
 PR 30-JAN-2001; 2001WO-US000670.
 PR 23-MAY-2001; 2001US-00864761.
 PR 10-OCT-2001; 2001US-0328205P.
 (AEOM-) AEOMICA INC.
 PA Shannon M;
 PI WPI; 2002-684061/74.
 DR
 XX
 PT Novel human SH3 domain (POSH)-like signaling protein 1 polypeptide, POSHL
 PT -1, useful for treating disorders associated with decreased expression or
 PT activity of human POSHL1.
 PS Example 2; SEQ ID NO 1947; 60bp + Sequence Listing; English.
 XX
 CC The invention relates to an isolated SH3 domain (POSH)-like signalling
 CC protein 1 (POSH1) polypeptide (I), comprising a sequence of 730 amino
 CC acids (S1, ABB83999), a sequence having 65% sequence identity to (S1),
 CC (S1) having 95% deviations, especially conservative substitutions or a
 CC fragment of the sequences comprising at least 8 contiguous amino acids.
 CC Human POSHL1 is a proto-oncogene/oncogene product that functions as an
 CC adaptor protein that interacts with Rho family small GTPases as well as
 CC downstream components of the signal transduction pathway. (I) is useful
 CC for identifying a specific binding partner. (I) and nucleic acids (II)
 CC encoding (I) are useful for diagnosing, monitoring disease and treating
 CC caused by altered expression of human POSHL1 including diagnosing and
 CC treating cancer, they useful in the development of vaccines and (II) is
 CC useful in gene therapy. (II) is useful for constructing microarrays which
 CC are useful for measuring and for surveying gene expression and creating
 CC transgenic non-human animals capable of producing the proteins. The
 CC present sequence is that of a scanning oligonucleotide useful in examples
 CC of the invention. Note: The present sequence did not form part of the
 CC printed specification, but is based on sequence information supplied to
 CC Derwent by the European Patent Office
 CC
 SQ Sequence 17 BP; 1 A; 5 C; 7 G; 4 T; 0 U; 0 Other;
 Query Match 2.8%; Score 11.8; DB 1; Length 17;
 Best Local Similarity 86.7%; Pred. No. 5e+02;
 Matches 13; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
 QY 92 CATCACCGAGCTCTGA 106
 DB 17 CACGACCGAGCTCTGA 3
 RESULT 1068
 ABV91235/C
 ID ABV91235 standard; DNA; 17 BP.
 XX
 AC ABV91235;
 XX
 DT 23-DEC-2002 (first entry)
 XX
 DE Human POSHL1 scanning oligonucleotide SEQ ID NO 1948.
 XX
 KW Human; POSHL1, SH3 domain; POSH-like signalling protein 1; oncogene;
 KW Rho GTPase; signal transduction; gene expression; cancer; vaccine;
 KW gene therapy; transgenic; ss.
 XX
 OS Homo sapiens.
 XX
 XX EP1239051-A2.
 XX PN
 XX PD 11-SEP-2002.
 XX

PF 28-JAN-2002; 2002EP-00001165.
 XX
 XX 30-JAN-2001; 2001WO-US000663.
 XX 30-JAN-2001; 2001WO-US000664.
 XX 30-JAN-2001; 2001WO-US000665.
 XX 30-JAN-2001; 2001WO-US000666.
 XX 30-JAN-2001; 2001WO-US000667.
 XX 30-JAN-2001; 2001WO-US000668.
 XX 30-JAN-2001; 2001WO-US000669.
 XX 30-JAN-2001; 2001WO-US000670.
 XX 23-MAY-2001; 2001US-00864761.
 XX 10-OCT-2001; 2001US-0328205P.
 (AEOM-) AEOMICA INC.
 PA Shannon M;
 PI WPI; 2002-684061/74.
 DR
 XX
 PT Novel human SH3 domain (POSH)-like signaling protein 1 polypeptide, POSHL
 PT -1, useful for treating disorders associated with decreased expression or
 PT activity of human POSHL1.
 PS Example 2; SEQ ID NO 1948; 60bp + Sequence Listing; English.
 XX
 CC The invention relates to an isolated SH3 domain (POSH)-like signalling
 CC protein 1 (POSH1) polypeptide (I), comprising a sequence of 730 amino
 CC acids (S1, ABB83999), a sequence having 65% sequence identity to (S1),
 CC (S1) having 95% deviations, especially conservative substitutions or a
 CC fragment of the sequences comprising at least 8 contiguous amino acids.
 CC Human POSHL1 is a proto-oncogene/oncogene product that functions as an
 CC adaptor protein that interacts with Rho family small GTPases as well as
 CC downstream components of the signal transduction pathway. (I) is useful
 CC for identifying a specific binding partner. (I) and nucleic acids (II)
 CC encoding (I) are useful for diagnosing, monitoring disease and treating
 CC caused by altered expression of human POSHL1 including diagnosing and
 CC treating cancer, they useful in the development of vaccines and (II) is
 CC useful in gene therapy. (II) is useful for constructing microarrays which
 CC are useful for measuring and for surveying gene expression and creating
 CC transgenic non-human animals capable of producing the proteins. The
 CC present sequence is that of a scanning oligonucleotide useful in examples
 CC of the invention. Note: The present sequence did not form part of the
 CC printed specification, but is based on sequence information supplied to
 CC Derwent by the European Patent Office
 CC
 SQ Sequence 17 BP; 1 A; 4 C; 8 G; 4 T; 0 U; 0 Other;
 Query Match 2.8%; Score 11.8; DB 1; Length 17;
 Best Local Similarity 86.7%; Pred. No. 5e+02;
 Matches 13; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
 QY 92 CATCACCGAGCTCTGA 106
 DB 16 CACGACCGAGCTCTGA 2
 RESULT 1069
 ABL31714
 ID ABL31714 standard; DNA; 17 BP.
 XX
 AC ABL31714;
 XX
 DT 21-MAR-2002 (first entry)
 XX
 DE Human HLA genotyping oligonucleotide SEQ ID NO 1203.
 XX
 KW Human; human leukocyte antigen; HLA; genotype; polymorphism;
 KW immunogenetic; transplantation; genetic disease; ss.
 XX
 OS Homo sapiens.
 XX
 XX WO200192572-A1.
 XX
 XX

PD 06-DEC-2001.
 XX 01-JUN-2001; 2001WO-JP004662.
 PF 01-JUN-2000; 2000JP-00164798.
 XX (NISN) NISSHINEO IND INC.
 PA (SYST-) SYSTEM RES INC.
 XX Inoko H, Kagiya T, Ichihara T, Matsumura Y, Moriya S, Nishida M;
 PI WPI; 2002-122074/16.
 XX Human leukocyte antigen (HLA) typing, useful for judging HLA genotypes of
 PT individuals e.g. by determining immunogenetic differences when
 PT transplanting between them.
 XX
 PS Claim 10; Page 321; 345pp; Japanese.
 XX The invention relates to a typing kit for judging human leukocyte antigen
 CC (HLA) genotype of a sample by hybridising a substrate on which 10-24 base
 CC oligonucleotides (AB130512-AB131809) originating in the sequences of
 CC genes e.g. belonging to HLA class I antigens on human genome and
 CC containing gene polymorphisms as alloantigens have been immobilised as
 CC primers for amplification of cleaved nucleic acid relating to gene
 CC polymorphisms. The method is useful for judging HLA genotypes of
 CC individuals by determining immunogenetic differences before transplanting
 CC between them, providing genetic information to decide compatibility of
 CC organ and tissue for transplantation e.g. of bone marrow, kidney, liver,
 CC pancreas, langerhans islet in pancreas and cornea, susceptibility
 CC diagnosis of genetic diseases and identifying individuals
 XX Sequence 17 BP; 6 A; 5 C; 6 G; 0 T; 0 U; 0 Other;
 SQ
 XX
 Query Match 2.8%; Score 11.8; DB 1; Length 17;
 Best Local Similarity 86.7%; Pred. No. 5e+02;
 Matches 13; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
 QY 176 CGAGTCGACGACCA 190
 Db 2 CAAGCCAGGACCA 16
 RESULT 1070
 ABK56849/c
 ID ABK56849 standard; RNA; 17 BP.
 XX
 AC ABK56849;
 XX
 DT 02-JUL-2002 (first entry)
 XX
 DE Human CLCA1 gene enzymatic nucleic acid #1220.
 XX Human; chloride channel calcium activated 1; CLCA1; ss; antiasthmatic;
 KM antiinflammatory; chronic obstructive pulmonary disease; COPD; asthma;
 KM chronic bronchitis; cystic fibrosis; obstructive bowel syndrome;
 KM oxygen therapy; bronchodilator; corticosteroid; vaccination; mucokinetic;
 KM acetylcysteine.
 XX
 OS Homo sapiens.
 XX
 OS WO200211674-A2.
 PN 14-FEB-2002.
 PD 09-AUG-2001; 2001WO-US024970.
 XX
 PF 09-AUG-2000; 2000US-0224383P.
 XX
 PR 09-AUG-2000; 2000US-0224383P.
 XX (RIBO-) RIBOZYME PHARM INC.
 PA (SYNT) SYNTAX USA LLC.
 PA (THOM/) THOMPSON J.
 XX

PI Thompson J, Moswigen J, McKenzie T, Ayers D, Szymkowski DE;
 PI Grube A;
 XX WPI; 2002-217145/27.
 DR Enzymatic polynucleotide that down regulates expression of chloride
 XX channel calcium activated gene, useful for treating Chronic obstructive
 PT pulmonary disease (COPD), chronic bronchitis and asthma.
 PT
 XX Claim 4; Page 84; 152pp; English.
 XX The invention relates to enzymatic nucleic acid molecules that down
 CC regulate expression of chloride channel calcium activated 1 (CLCA1) genes
 CC by cleaving RNA derived from the gene. The nucleic acid sequences are
 CC useful as pharmaceutical agents for treating conditions such as chronic
 CC obstructive pulmonary disease (COPD), chronic bronchitis, asthma, cystic
 CC fibrosis, obstructive bowel syndrome and any other diseases or conditions
 CC that are related to or will respond to the levels of CLCA1 in a cell or
 CC tissue. The sequences are useful for reducing CLCA1 activity in a cell,
 CC hence, are useful for treatment of a patient having a condition
 CC associated with the level of CLCA1, where the invention further comprises
 CC the use of one or more therapies under conditions suitable for the
 CC treatment, for example, oxygen therapy, bronchodilators, corticosteroids,
 CC antibacterials, vaccinations, acetylcysteine and mucokinetic agents. The
 CC nucleic acids of the invention are also used as diagnostic tools to
 CC examine genetic drift and mutations within diseased cells or to detect
 CC the presence of CLCA1 RNA in a cell. This sequence represents an
 CC enzymatic nucleic acid molecule of the invention
 XX Sequence 17 BP; 3 A; 7 C; 2 G; 0 T; 5 U; 0 Other;
 SQ
 XX
 Query Match 2.8%; Score 11.8; DB 1; Length 17;
 Best Local Similarity 86.7%; Pred. No. 5e+02;
 Matches 13; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
 QY 11 GAAATGCGGGTGAC 25
 Db 16 GAAATGCGGGTTAC 2
 RESULT 1071
 ABK56242/c
 ID ABK56242 standard; RNA; 17 BP.
 XX
 AC ABK56242;
 XX
 DT 02-JUL-2002 (first entry)
 XX
 DE Human CLCA1 gene enzymatic nucleic acid #613.
 XX Human; chloride channel calcium activated 1; CLCA1; ss; antiasthmatic;
 KM antiinflammatory; chronic obstructive pulmonary disease; COPD; asthma;
 KM chronic bronchitis; cystic fibrosis; obstructive bowel syndrome;
 KM oxygen therapy; bronchodilator; corticosteroid; vaccination; mucokinetic;
 KM acetylcysteine.
 XX
 OS Homo sapiens.
 XX
 OS WO200211674-A2.
 PN 14-FEB-2002.
 PD 09-AUG-2001; 2001WO-US024970.
 XX
 PF 09-AUG-2000; 2000US-0224383P.
 XX
 PR 09-AUG-2000; 2000US-0224383P.
 XX (RIBO-) RIBOZYME PHARM INC.
 PA (SYNT) SYNTAX USA LLC.
 PA (THOM/) THOMPSON J.
 XX Thompson J, Moswigen J, McKenzie T, Ayers D, Szymkowski DE;
 PI Grube A;
 XX

DR WPI; 2002-217145/27.
 XX
 PT Enzymatic polynucleotide that down regulates expression of chloride
 PT channel calcium activated genes, useful for treating Chronic obstructive
 PT pulmonary disease (COPD), chronic bronchitis and asthma.
 XX
 PS Claim 4; Page 65; 152pp; English.
 CC The invention relates to enzymatic nucleic acid molecules that down
 CC regulate expression of chloride channel calcium activated 1 (ClCA1) genes
 CC by cleaving RNA derived from the genes. The nucleic acid sequences are
 CC useful as pharmaceutical agents for treating conditions such as chronic
 CC obstructive pulmonary disease (COPD), chronic bronchitis, asthma, cystic
 CC fibrosis, obstructive bowel syndrome and any other diseases or conditions
 CC that are related to or will respond to the levels of ClCA1 in a cell or
 CC tissue. The sequences are useful for reducing ClCA1 activity in a cell,
 CC hence, are useful for treatment of a patient having a condition
 CC associated with the level of ClCA1, where the invention further comprises
 CC the use of one or more therapies under conditions suitable for the
 CC treatment, for example, oxygen therapy, bronchodilators, corticosteroids,
 CC antibiotics, vaccinations, acetylcysteine and mucokinetic agents. The
 CC nucleic acids of the invention are also used as diagnostic tools to
 CC examine genetic drift and mutations within diseased cells or to detect
 CC the presence of ClCA1 RNA in a cell. This sequence represents an
 CC enzymatic nucleic acid molecule of the invention
 XX
 SQ Sequence 17 BP; 3 A; 6 C; 2 G; 0 T; 6 U; 0 Other;
 Query Match 2.8%; Score 11.8; DB 1; Length 17;
 Best Local Similarity 86.7%; Pred. No. 5e+02; 2; Indels 0; Gaps 0;
 Matches 13; Conservative 0; Mismatches 2;
 Qy 11 GAAACTGCGGTCAC 25
 Db 17 GAAATCGCGGTAC 3
 RESULT 1072
 ABZ95233
 ID ABZ95233 standard; DNA; 17 BP.
 XX
 AC ABZ95233;
 XX
 DT 17-OCT-2003 (first entry)
 XX
 DE Human IL3 receptor antisense fragment no.1097.
 XX
 KW Human; antisense; lung dysfunction; nasal airway dysfunction;
 KW antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic;
 KW antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy;
 KW antisense gene therapy; respiratory; lung; adenosine sensitivity;
 KW adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;
 KW lung inflammation; respiratory disease; ds.
 XX
 OS Homo sapiens.
 XX
 PN WO200285308-A2.
 XX
 PD 31-OCT-2002.
 XX
 PF 23-APR-2002; 2002WO-US013135.
 XX
 PR 24-APR-2001; 2001US-0286137P.
 XX
 PA (EPIG-) EPIGENESIS PHARM INC.
 XX
 PI Myce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;
 PI Miller S, Tang L, Shahabuddin S;
 XX
 DR WPI; 2003-229219/22.
 XX
 PT Pharmaceutical composition for treating ailments associated with impaired
 PT respiration, has oligo(s) antisense to specific gene(s) or its

PT corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or
 PT ubi quinone.
 XX
 PS Disclosure; SEQ ID NO 10475; 872pp; English.
 CC The invention relates to a novel pharmaceutical composition, which has a
 CC first active agent comprising an oligonucleotide antisense to the
 CC initiation codon, coding region, 5' or 3' end genomic flanking regions,
 CC 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of
 CC junctions of genes encoding a polypeptide associated with lung and/or
 CC nasal airway dysfunction and a second active agent comprising an
 CC antiinflammatory steroid and ubiquinone. A composition of the invention
 CC has antiinflammatory, antiallergic, antiasthmatic, hypotensive,
 CC immunosuppressive, and cytostatic activity. The composition may have a
 CC use in antisense gene therapy. The composition is useful for treating or
 CC preventing a respiratory, lung or malignant disease or condition, also
 CC for enhancing the prophylactic or therapeutic respiratory effect of an
 CC antiinflammatory steroid in a subject, for reducing or depleting levels
 CC of, or reducing sensitivity to adenosine, reducing levels of adenosine
 CC receptor, producing bronchodilation, increasing levels of ubiquinone or
 CC lung surfactant in a subject's tissue, or treating bronchoconstriction,
 CC lung inflammation, lung allergies, or a respiratory disease or condition.
 CC Note: The sequence data for this patent is not represented in the printed
 CC specification, but was obtained in electronic format directly from WIPO
 CC at ftp.wipo.int/pub/published_pct_sequences
 XX
 SQ Sequence 17 BP; 0 A; 7 C; 3 G; 7 T; 0 U; 0 Other;
 Query Match 2.8%; Score 11.8; DB 1; Length 17;
 Best Local Similarity 86.7%; Pred. No. 5e+02; 2; Indels 0; Gaps 0;
 Matches 13; Conservative 0; Mismatches 2;
 Qy 242 CTGCTTCCCGGCTC 256
 Db 1 CTCTTCCCGGCTC 15
 RESULT 1073
 ACC53777/c
 ID ACC53777 standard; DNA; 17 BP.
 XX
 AC ACC53777;
 XX
 DT 27-JUN-2003 (first entry)
 XX
 DE Human tumour suppressor sequence #2544.
 XX
 KW ss; tumour suppressor; antitumour; cytostatic; tumour suppression;
 KW tumour regression; apoptosis; virus resistance; diagnosis;
 KW cellular degeneration.
 XX
 OS Homo sapiens.
 XX
 PN FR2826373-A1.
 XX
 PD 27-DEC-2002.
 XX
 PF 20-JUN-2001; 2001FR-00008139.
 XX
 PR 20-JUN-2001; 2001FR-00008139.
 XX
 PA (MOLE-) MOLECULAR ENGINES LAB SA.
 XX
 PI Tuijnder M, Teijerman A, Amson R;
 XX
 DR WPI; 2003-250438/25.
 XX
 PT New nucleic acid sequences associated with tumor suppression, regression,
 PT apoptosis or virus resistance are useful to diagnose and treat viral
 PT disease, development of tumor cells and cell degeneration.
 XX
 PS Claim 1; Page 627; 798pp; French.

CC This sequence represents an isolated nucleic acid sequence associated
 CC with tumour suppression or regression, apoptosis or virus resistance. The
 CC invention relates to these sequences or sequences having at least 80%
 CC identity to them, and polypeptides encoded by the sequences or
 CC polypeptides having 80% identity to the polypeptide sequences. The
 CC invention is used to diagnose or treat viral disease or disease
 CC characterized by development of tumour cells or cellular degeneration
 XX

Sequence 17 BP; 4 A; 6 C; 2 G; 5 T; 0 U; 0 Other;

Query Match 2.8%; Score 11.8; DB 1; Length 17;
 Best Local Similarity 86.7%; Pred. No. 5e+02;
 Matches 13; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

200 CTCGGTGAAGCAGA 214
 17 CTGGTGAAGCAGA 3

RESULT 1074
 ID ABR37623/c
 AC ABR37623; standard; DNA; 17 BP.
 AC ABR37623;
 DT 12-JUN-2003 (first entry)
 DE Tumour suppression related human fukutin oligo SEQ ID No 3260.
 XX
 KM Cytostatic; virocid; neuroprotective; nootropic; neuroleptic; gene chip;
 KM antisense; sense; tumour; cell degeneration; cancer; Alzheimer's disease;
 KM schizophrenia; protein chip; gene therapy; tumour suppression;
 KM human fukutin; ds.
 OS Homo sapiens.
 PN WO2003025175-A2.
 PD 27-MAR-2003.
 PF 17-SEP-2002; 2002WO-IB004208.
 PR 17-SEP-2001; 2001FR-00011978.
 PA (MOLE-) MOLECULAR ENGINES LAB.
 PI Telerman A, Amson R, Tuijnder M;
 DR WPI; 2003-313353/30.
 DR WPI; 2003-313353/30.
 PT New isolated nucleic acid, useful for treating viral diseases associated
 PT with tumors and cell degeneration, also related polypeptides, antibodies
 PT and transfected cells.
 PS Disclosure; Page 415; 720pp; French.
 XX
 CC The invention relates to a novel isolated 17 mer nucleic acid sequence,
 CC given in the specification, a sequence containing at least 15 consecutive
 CC nucleotides from the 17 mer sequence, a sequence with, after optimal
 CC alignment, at least 80 % identity to the 17 mer sequence, a sequence that
 CC hybridizes to them under highly stringent conditions, or the complement
 CC of any of them, or the corresponding RNA. The novel isolated nucleic
 CC acids of the invention are useful as probes and primers for detecting,
 CC identifying, quantifying and/or amplifying a nucleic acid, e.g. as one
 CC component of a gene chip, in vitro as (anti)sense reagents, and for
 CC production of recombinant polypeptides. Any of the nucleic acids,
 CC polypeptides, vectors containing the nucleic acids, cells containing the
 CC vector or antibodies directed against the polypeptides are useful for
 CC preparation of pharmaceuticals for prevention and/or treatment of viral
 CC diseases that are characterized by development of tumours or cell
 CC degeneration, specifically cancer but also Alzheimer's disease and
 CC schizophrenia. Analysis of the expression of the 17 mer nucleic acids in
 CC patient samples is useful for diagnosis and/or prognosis of these

CC diseases. The polypeptides can also be used to generate antibodies, and
 CC both the polypeptide and antibodies are useful as components of protein
 CC chips. The nucleic acid sequences of the invention can be used in gene
 CC therapy. This polynucleotide sequence represents a tumour suppression
 CC related human fukutin oligonucleotide of the invention
 XX

Sequence 17 BP; 3 A; 4 C; 6 G; 4 T; 0 U; 0 Other;

Query Match 2.8%; Score 11.8; DB 1; Length 17;
 Best Local Similarity 86.7%; Pred. No. 5e+02;
 Matches 13; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

294 GTGAAGACCTGAGC 308
 15 GTGAAGACCTGATC 1

RESULT 1075
 ID ABR36046/c
 AC ABR36046; standard; DNA; 17 BP.
 AC ABR36046;
 DT 12-JUN-2003 (first entry)
 DE Tumour suppression related human fukutin oligo SEQ ID No 1683.
 XX
 KM Cytostatic; virocid; neuroprotective; nootropic; neuroleptic; gene chip;
 KM antisense; sense; tumour; cell degeneration; cancer; Alzheimer's disease;
 KM schizophrenia; protein chip; gene therapy; tumour suppression;
 KM human fukutin; ds.
 OS Homo sapiens.
 PN WO2003025175-A2.
 PD 27-MAR-2003.
 PF 17-SEP-2002; 2002WO-IB004208.
 PR 17-SEP-2001; 2001FR-00011978.
 PA (MOLE-) MOLECULAR ENGINES LAB.
 PI Telerman A, Amson R, Tuijnder M;
 DR WPI; 2003-313353/30.
 DR WPI; 2003-313353/30.
 PT New isolated nucleic acid, useful for treating viral diseases associated
 PT with tumors and cell degeneration, also related polypeptides, antibodies
 PT and transfected cells.
 PS Disclosure; Page 229; 720pp; French.
 XX
 CC The invention relates to a novel isolated 17 mer nucleic acid sequence,
 CC given in the specification, a sequence containing at least 15 consecutive
 CC nucleotides from the 17 mer sequence, a sequence with, after optimal
 CC alignment, at least 80 % identity to the 17 mer sequence, a sequence that
 CC hybridizes to them under highly stringent conditions, or the complement
 CC of any of them, or the corresponding RNA. The novel isolated nucleic
 CC acids of the invention are useful as probes and primers for detecting,
 CC identifying, quantifying and/or amplifying a nucleic acid, e.g. as one
 CC component of a gene chip, in vitro as (anti)sense reagents, and for
 CC production of recombinant polypeptides. Any of the nucleic acids,
 CC polypeptides, vectors containing the nucleic acids, cells containing the
 CC vector or antibodies directed against the polypeptides are useful for
 CC preparation of pharmaceuticals for prevention and/or treatment of viral
 CC diseases that are characterized by development of tumours or cell
 CC degeneration, specifically cancer but also Alzheimer's disease and
 CC schizophrenia. Analysis of the expression of the 17 mer nucleic acids in
 CC patient samples is useful for diagnosis and/or prognosis of these
 CC diseases. The polypeptides can also be used to generate antibodies, and
 CC both the polypeptide and antibodies are useful as components of protein

CC chips. The nucleic acid sequences of the invention can be used in gene
 CC therapy. This polynucleotide sequence represents a tumour suppression
 CC related human faktin oligonucleotide of the invention
 XX
 SQ Sequence 17 BP; 7 A; 3 C; 6 G; 1 T; 0 U; 0 Other;

Query March 2.8%; Score 11.8; DB 1; Length 17;
 Best Local Similarity 86.7%; Pred. No. 5e+02; 2; Indels 0; Gaps 0;
 Matches 13; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 367 TCACCTTCCTGACC 381
 Db 15 TCCCTTCCTGACC 1

RESULT 1076
 ACA06660/c
 ID ACA06660 standard; RNA; 17 BP.
 XX
 AC ACA06660;

DT 03-JUN-2003 (first entry)

DE NFkB sub-unit modulating inozyme substrate #479.

XX Enzymatic nucleic acid; nuclear factor kappa B; NFkB; inozyme; zinzyme;
 KW G-cleaver; amberzyme; cancer; REL-A activity; breast cancer; human;
 KW lung cancer; prostate cancer; colorectal cancer; brain cancer;
 KW oesophageal cancer; stomach cancer; bladder cancer; pancreatic cancer;
 KW cervical cancer; head and neck cancer; ovarian cancer; melanoma;
 KW lymphoma; glioma; multidrug resistant cancer; REL-A-specific inhibitor;
 KW chemotherapy; paclitaxel; docetaxel; cisplatin; methotrexate;
 KW cyclophosphamide; doxorubicin; fluorouracil carboplatin; edatrexate;
 KW gemcitabine; radiation therapy; inflammatory disease; asthma; diabetes;
 KW rheumatoid arthritis; restenosis; Crohn's disease; obesity; ischaemia;
 KW gene therapy; autoimmune disease; lupus; multiple sclerosis; sepsis;
 KW transplant/graft rejection; reperfusion injury; glomerulonephritis;
 KW allergic airway inflammation; inflammatory bowel disease; infection; ss.

XX Homo sapiens.

XX US2002177568-A1.

PD 28-NOV-2002.

PF 23-MAY-2001; 2001US-00864785.

XX 07-DEC-1992; 92US-00987132.

PR 18-MAY-1994; 94US-00245466.

PR 15-AUG-1994; 94US-00291932.

PR 23-DEC-1996; 96US-00777916.

XX (STIN/) STINCHOMB D T.

PA (MCSW/) MCSWIGEN J.

PA (DRAP/) DRAPER K G.

PI Stinchcomb DT, Mcswigen J, Draper KG;

XX WPI; 2003-340953/32.

PT Novel enzymatic nucleic acid molecules which down regulates expression of
 PT a sequence encoding a subunit of nuclear factor kappa B useful for
 PT treating cancer, inflammatory disorders and autoimmune diseases.

XX Claim 3; Page 34; 72PP; English.

XX The invention describes an enzymatic nucleic acid molecule (I) which down
 CC regulates expression of a sequence encoding a subunit of nuclear factor
 CC kappa B (NFkB), where (I) is an inozyme, zinzyme, G-cleaver or amberzyme
 CC configuration. The enzymatic nucleic acid molecule is adapted to treat
 CC cancer and is useful for down-regulating REL-A activity in a cell, for
 CC treating a patient having a condition associated with the level of REL-A.
 CC (I) is useful for cleaving RNA comprising a sequence of REL-A gene, in

CC the presence of a divalent cation, especially Mg²⁺. The enzymatic and
 CC antisense nucleic acid molecules are useful for treating breast, lung,
 CC prostate, colorectal, brain, oesophageal, stomach, bladder, pancreatic,
 CC cervical, head and neck, ovarian cancer, melanoma, lymphoma, glioma or
 CC multidrug resistant cancer. The method involves use of other drug
 CC therapies such as monoclonal antibodies, REL-A-specific inhibitors or
 CC chemotherapy including paclitaxel, docetaxel, cisplatin, methotrexate,
 CC cyclophosphamide, doxorubicin, fluorouracil carboplatin, edatrexate,
 CC gemcitabine or radiation therapy. The enzymatic and antisense nucleic
 CC acid molecules are also useful for treating inflammatory disease such as
 CC rheumatoid arthritis, restenosis, asthma, Crohn's disease, diabetes,
 CC obesity, autoimmune disease, lupus, multiple sclerosis, transplant/graft
 CC rejection, gene therapy applications, ischaemia/reperfusion injury
 CC (central nervous system (CNS) and myocardial), glomerulonephritis,
 CC sepsis, allergic airway inflammation, inflammatory bowel disease or
 CC infection. This sequence represents the substrate of a novel enzymatic
 CC nucleic acid molecule
 XX

SQ Sequence 17 BP; 0 A; 6 C; 9 G; 0 T; 2 U; 0 Other;

Query March 2.8%; Score 11.8; DB 1; Length 17;
 Best Local Similarity 86.7%; Pred. No. 5e+02; 2; Indels 0; Gaps 0;
 Matches 13; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 306 AGCCCCGGGAGCCGC 320
 Db 17 AGCCCCGGGAGCCGC 3

RESULT 1077
 ACA06580
 ID ACA06580 standard; RNA; 17 BP.
 XX
 AC ACA06580;

DT 03-JUN-2003 (first entry)

DE NFkB sub-unit modulating inozyme substrate #399.

XX Enzymatic nucleic acid; nuclear factor kappa B; NFkB; inozyme; zinzyme;
 KW G-cleaver; amberzyme; cancer; REL-A activity; breast cancer; human;
 KW lung cancer; prostate cancer; colorectal cancer; brain cancer;
 KW oesophageal cancer; stomach cancer; bladder cancer; pancreatic cancer;
 KW cervical cancer; head and neck cancer; ovarian cancer; melanoma;
 KW lymphoma; glioma; multidrug resistant cancer; REL-A-specific inhibitor;
 KW chemotherapy; paclitaxel; docetaxel; cisplatin; methotrexate;
 KW cyclophosphamide; doxorubicin; fluorouracil carboplatin; edatrexate;
 KW gemcitabine; radiation therapy; inflammatory disease; asthma; diabetes;
 KW rheumatoid arthritis; restenosis; Crohn's disease; obesity; ischaemia;
 KW gene therapy; autoimmune disease; lupus; multiple sclerosis; sepsis;
 KW transplant/graft rejection; reperfusion injury; glomerulonephritis;
 KW allergic airway inflammation; inflammatory bowel disease; infection; ss.

XX Homo sapiens.

XX US2002177568-A1.

PD 28-NOV-2002.

PF 23-MAY-2001; 2001US-00864785.

XX 07-DEC-1992; 92US-00987132.

PR 18-MAY-1994; 94US-00245466.

PR 15-AUG-1994; 94US-00291932.

PR 23-DEC-1996; 96US-00777916.

XX (STIN/) STINCHOMB D T.

PA (MCSW/) MCSWIGEN J.

PA (DRAP/) DRAPER K G.

PI Stinchcomb DT, Mcswigen J, Draper KG;

XX WPI; 2003-340953/32.

XX Novel enzymatic nucleic acid molecules which down regulates expression of
PT a sequence encoding a subunit of nuclear factor kappa B useful for
PT treating cancer, inflammatory disorders and autoimmune diseases.
XX
XX Claim 3; Page 33; 72pp; English.
XX
CC The invention describes an enzymatic nucleic acid molecule (I) which down
CC regulates expression of a sequence encoding a subunit of nuclear factor
CC kappa B (NFkB), where (I) is an inozyme, zinzyme, G-cleaver or amberzyme
CC configuration. The enzymatic nucleic acid molecule is adapted to treat
CC cancer and is useful for down-regulating RBL-A activity in a cell, for
CC treating a patient having a condition associated with the level of RBL-A.
CC (I) is useful for cleaving RNA comprising a sequence of RBL-A gene, in
CC the presence of a divalent cation, especially Mg²⁺. The enzymatic and
CC antisense nucleic acid molecules are useful for treating breast, lung,
CC prostate, colorectal, brain, oesophageal, stomach, bladder, pancreatic,
CC cervical, head and neck, ovarian cancer, melanoma, lymphoma, glioma or
CC multidrug resistant cancer. The method involves use of other drug
CC therapies such as monoclonal antibodies, RBL-A-specific inhibitors or
CC chemotherapy including paclitaxel, docetaxel, cisplatin, methotrexate,
CC cyclophosphamide, doxorubicin, fluorouracil carboplatin, edatrexate,
CC gemcitabine or radiation therapy. The enzymatic and antisense nucleic
CC acid molecules are also useful for treating inflammatory disease such as
CC rheumatoid arthritis, restenosis, asthma, Crohn's disease, diabetes,
CC obesity, autoimmune disease, lupus, multiple sclerosis, transplant/graft
CC rejection, gene therapy applications, ischaemia/reperfusion injury
CC (central nervous system (CNS) and myocardial), glomerulonephritis,
CC sepsis, allergic airway inflammation, inflammatory bowel disease or
CC infection. This sequence represents the substrate of a novel enzymatic
CC nucleic acid molecule
XX
SQ Sequence 17 BP; 4 A; 4 C; 8 G; 0 T; 1 U; 0 Other;
Query Match 2.8%; Score 11.8; DB 1; Length 17;
Best Local Similarity 80.0%; Pred. No. 5e+02; 2; Indels 0; Gaps 0;
Matches 12; Conservative 1; Mismatches 2;
QY 286 CCAGCTGTGAAGC 300
Dd 3 CCAGCTGTGAAGC 17
RESULT 1078
ACA06587/c
ID ACA06587 standard; RNA; 17 BP.
AC ACA06587;
XX
XX 03-JUN-2003 (first entry)
XX
DE NFkB sub-unit modulating inozyme substrate #406.
XX
XX Enzymatic nucleic acid; nuclear factor kappa B; NFkB; inozyme; zinzyme;
XX G-cleaver; amberzyme; cancer; RBL-A activity; breast cancer; human;
XX lung cancer; prostate cancer; colorectal cancer; brain cancer;
XX oesophageal cancer; stomach cancer; bladder cancer; pancreatic cancer;
XX cervical cancer; head and neck cancer; ovarian cancer; melanoma;
XX lymphoma; glioma; multidrug resistant cancer; RBL-A-specific inhibitor;
XX chemotheraphy; paclitaxel; docetaxel; cisplatin; methotrexate;
XX cyclophosphamide; doxorubicin; fluorouracil carboplatin; edatrexate;
XX gemcitabine; radiation therapy; inflammatory disease; asthma; diabetes;
XX rheumatoid arthritis; restenosis; Crohn's disease; obesity; ischaemia;
XX gene therapy; autoimmune disease; lupus; multiple sclerosis; sepsis;
XX transplant/graft rejection; reperfusion injury; glomerulonephritis;
XX allergic airway inflammation; inflammatory bowel disease; infection; ss.
XX
XX Homo sapiens.
XX
XX OS
XX PN US200217568-A1.
XX
XX 28-NOV-2002.

PF 23-MAY-2001; 2001US-00864785.
XX
XX 07-DEC-1992; 92US-00987132.
PR 18-MAY-1994; 94US-00245466.
PR 15-AUG-1994; 94US-00291932.
PR 23-DEC-1996; 96US-00777916.
XX
XX (STN/) STINCHCOMB D T.
XX (GCSW/) MCSWIGEN J.
XX (DRAV/) DRAPER K G.
XX
PI Stinchcomb DT, Mcswigen J, Draper KG;
XX
XX MPI; 2003-340953/32.
XX
XX Novel enzymatic nucleic acid molecules which down regulates expression of
PT a sequence encoding a subunit of nuclear factor kappa B useful for
PT treating cancer, inflammatory disorders and autoimmune diseases.
XX
XX Claim 3; Page 33; 72pp; English.
XX
CC The invention describes an enzymatic nucleic acid molecule (I) which down
CC regulates expression of a sequence encoding a subunit of nuclear factor
CC kappa B (NFkB), where (I) is an inozyme, zinzyme, G-cleaver or amberzyme
CC configuration. The enzymatic nucleic acid molecule is adapted to treat
CC cancer and is useful for down-regulating RBL-A activity in a cell, for
CC treating a patient having a condition associated with the level of RBL-A.
CC (I) is useful for cleaving RNA comprising a sequence of RBL-A gene, in
CC the presence of a divalent cation, especially Mg²⁺. The enzymatic and
CC antisense nucleic acid molecules are useful for treating breast, lung,
CC prostate, colorectal, brain, oesophageal, stomach, bladder, pancreatic,
CC cervical, head and neck, ovarian cancer, melanoma, lymphoma, glioma or
CC multidrug resistant cancer. The method involves use of other drug
CC therapies such as monoclonal antibodies, RBL-A-specific inhibitors or
CC chemotherapy including paclitaxel, docetaxel, cisplatin, methotrexate,
CC cyclophosphamide, doxorubicin, fluorouracil carboplatin, edatrexate,
CC gemcitabine or radiation therapy. The enzymatic and antisense nucleic
CC acid molecules are also useful for treating inflammatory disease such as
CC rheumatoid arthritis, restenosis, asthma, Crohn's disease, diabetes,
CC obesity, autoimmune disease, lupus, multiple sclerosis, transplant/graft
CC rejection, gene therapy applications, ischaemia/reperfusion injury
CC (central nervous system (CNS) and myocardial), glomerulonephritis,
CC sepsis, allergic airway inflammation, inflammatory bowel disease or
CC infection. This sequence represents the substrate of a novel enzymatic
CC nucleic acid molecule
XX
SQ Sequence 17 BP; 2 A; 6 C; 5 G; 0 T; 4 U; 0 Other;
Query Match 2.8%; Score 11.8; DB 1; Length 17;
Best Local Similarity 86.7%; Pred. No. 5e+02; 2; Indels 0; Gaps 0;
Matches 13; Conservative 0; Mismatches 2;
QY 265 TGCACCTGAGCAGC 279
Dd 15 TGCACCTGAGCAGC 1
RESULT 1079
ADB02422
ID ADB02422 standard; DNA; 17 BP.
XX
XX ADB02422;
XX
XX 20-NOV-2003 (first entry)
XX
XX Human MD24 scanning oligonucleotide SEQ ID 3408.
XX
XX
XX Cytostatic; immunostimulant; gene therapy; vaccine; human;
XX zinc finger protein; MD23; MD24; MD27; MD212; chromosome 7q22.1;
XX chromosome 6p21.3-22.2; chromosome 16p11.2; chromosome 15q26.1; cancer;
XX developmental disorder; ss.
XX
XX Homo sapiens.
XX
XX OS

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XX EN EP1281758-A2.
XX PD 05-FEB-2003.
XX PF 30-JUL-2002; 2002EP-00016874.
XX PR 02-AUG-2001; 2001US-00922181.
XX PA (AEOM-) AEOMICA INC.
XX PI Shannon M, Gu Y, Nguyen C;
XX PT WPI; 2003-423107/40.
XX DR
XX PT New zinc finger-containing proteins and nucleic acids, useful in
XX PT manufacturing a medicament for treating or preventing a disorder
XX PT associated with decreased or increased expression or activity of MD23,
XX PT MD24, MD27 or MD212, e.g. cancer.
XX PS Example 8; SEQ ID NO 3408; 103pp; English.
XX CC The present invention relates to novel human zinc finger-containing
XX CC proteins and their coding sequences: MD23, MD24, MD27, MD212. MD23 is
XX CC encoded at chromosome 7q22.1, MD24 is encoded at chromosome 6p21.3-22.2,
XX CC MD27 is encoded at chromosome 16p11.2 and MD212 is encoded at chromosome
XX CC 15q26.1. The MD23, MD24, MD27, and MD212 sequences are useful in therapy,
XX CC or in manufacturing a medicament for treating or preventing a disorder
XX CC associated with decreased or increased expression or activity of MD23,
XX CC MD24, MD27, or MD212, e.g. cancer or developmental disorders. The nucleic
XX CC acids and proteins are also useful for diagnosing or monitoring a disease
XX CC caused by altered expression of MD23, MD24, MD27, or MD212. The nucleic
XX CC acids can also be used as probes to detect and characterize gross
XX CC alterations in MD23, MD24, MD27, or MD212 genetic locus. The probes are
XX CC useful in constructing microarrays for measuring gene expression. The
XX CC proteins are useful as therapeutic agents for gene therapy or as
XX CC vaccines. The present sequence was used to illustrate the invention.
XX SQ Sequence 17 BP; 2 A; 6 C; 3 G; 6 T; 0 U; 0 Other;

Query Match          2.8%; Score 11.8; DB 1; Length 17;
Best Local Similarity 86.7%; Pred. No. 5e+02;
Matches 13; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 363 TTCTCTACTTCTCTG 377
DB 2 TTCTCTACTATCTCTG 16

RESULT 1080
ADA99249/C
ID ADA99249 standard; DNA; 17 BP.
XX AC ADA99249;
XX AD
XX DT 20-NOV-2003 (first entry)
XX DE Human MD23 scanning oligonucleotide SEQ ID 238.
XX KW Cytostatic; immunostimulant; gene therapy; vaccine; human;
XX KW zinc finger protein; MD23; MD24; MD27; MD212; chromosome 7q22.1;
XX KW chromosome 6p21.3-22.2; chromosome 16p11.2; chromosome 15q26.1; cancer;
XX KW developmental disorder; ss.
XX OS Homo sapiens.
XX EN EP1281758-A2.
XX PD 05-FEB-2003.
XX PF 30-JUL-2002; 2002EP-00016874.
XX PR 02-AUG-2001; 2001US-00922181.
```

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XX PA (AEOM-) AEOMICA INC.
XX PI Shannon M, Gu Y, Nguyen C;
XX PT WPI; 2003-423107/40.
XX DR
XX PT New zinc finger-containing proteins and nucleic acids, useful in
XX PT manufacturing a medicament for treating or preventing a disorder
XX PT associated with decreased or increased expression or activity of MD23,
XX PT MD24, MD27 or MD212, e.g. cancer.
XX PS Example 8; SEQ ID NO 238; 103pp; English.
XX CC The present invention relates to novel human zinc finger-containing
XX CC proteins and their coding sequences: MD23, MD24, MD27, MD212. MD23 is
XX CC encoded at chromosome 7q22.1, MD24 is encoded at chromosome 6p21.3-22.2,
XX CC MD27 is encoded at chromosome 16p11.2 and MD212 is encoded at chromosome
XX CC 15q26.1. The MD23, MD24, MD27, and MD212 sequences are useful in therapy,
XX CC or in manufacturing a medicament for treating or preventing a disorder
XX CC associated with decreased or increased expression or activity of MD23,
XX CC MD24, MD27, or MD212, e.g. cancer or developmental disorders. The nucleic
XX CC acids and proteins are also useful for diagnosing or monitoring a disease
XX CC caused by altered expression of MD23, MD24, MD27, or MD212. The nucleic
XX CC acids can also be used as probes to detect and characterize gross
XX CC alterations in MD23, MD24, MD27, or MD212 genetic locus. The probes are
XX CC useful in constructing microarrays for measuring gene expression. The
XX CC proteins are useful as therapeutic agents for gene therapy or as
XX CC vaccines. The present sequence was used to illustrate the invention.
XX SQ Sequence 17 BP; 5 A; 6 C; 3 G; 3 T; 0 U; 0 Other;

Query Match          2.8%; Score 11.8; DB 1; Length 17;
Best Local Similarity 86.7%; Pred. No. 5e+02;
Matches 13; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 61 AGTCTTGCACTACG 75
DB 17 AGTCTTGCACTACG 3

RESULT 1081
ADA99251/C
ID ADA99251 standard; DNA; 17 BP.
XX AC ADA99251;
XX AD
XX DT 20-NOV-2003 (first entry)
XX DE Human MD23 scanning oligonucleotide SEQ ID 240.
XX KW Cytostatic; immunostimulant; gene therapy; vaccine; human;
XX KW zinc finger protein; MD23; MD24; MD27; MD212; chromosome 7q22.1;
XX KW chromosome 6p21.3-22.2; chromosome 16p11.2; chromosome 15q26.1; cancer;
XX KW developmental disorder; ss.
XX OS Homo sapiens.
XX EN EP1281758-A2.
XX PD 05-FEB-2003.
XX PF 30-JUL-2002; 2002EP-00016874.
XX PR 02-AUG-2001; 2001US-00922181.
XX PA (AEOM-) AEOMICA INC.
XX PI Shannon M, Gu Y, Nguyen C;
XX PT WPI; 2003-423107/40.
XX DR
XX PT New zinc finger-containing proteins and nucleic acids, useful in
```

PT Manufacturing a medicament for treating or preventing a disorder
 PT associated with decreased or increased expression or activity of MD23,
 MD24, MD27 or MD212, e.g. cancer.
 XX
 PS Example 8; SEQ ID NO 240; 103pp; English.
 CC The present invention relates to novel human zinc finger-containing
 CC proteins and their coding sequences: MD23, MD24, MD27, MD212. MD23 is
 CC encoded at chromosome 7q22.1, MD24 is encoded at chromosome 6p21.3-22.2,
 CC MD27 is encoded at chromosome 16p11.2 and MD212 is encoded at chromosome
 CC 15q26.1. The MD23, MD24, MD27, and MD212 sequences are useful in therapy,
 CC or in manufacturing a medicament for treating or preventing a disorder
 CC associated with decreased or increased expression or activity of MD23,
 CC MD24, MD27, or MD212, e.g. cancer or developmental disorders. The nucleic
 CC acids and proteins are also useful for diagnosing or monitoring a disease
 CC caused by altered expression of MD23, MD24, MD27, or MD212. The nucleic
 CC acids can also be used as probes to detect and characterize gross
 CC alterations in MD23, MD24, MD27, or MD212 genetic loci. The probes are
 CC useful in constructing microarrays for measuring gene expression. The
 CC proteins are useful as therapeutic agents for gene therapy or as
 CC vaccines. The present sequence was used to illustrate the invention.
 CC
 SQ Sequence 17 BP; 4 A; 5 C; 3 G; 5 T; 0 U; 0 Other;
 Query Match 2.8%; Score 11.8; DB 1; Length 17;
 Best Local Similarity 86.7%; Pred. No. 5e+02;
 Matches 13; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
 QY 61 AGCTCTGCCTAGG 75
 DB 15 AGCTCTGCCTAGG 1
 RESULT 1082
 ADB03562/c
 ID ADB03562 standard; DNA; 17 BP.
 XX
 AC ADB03562;
 XX
 DT 20-NOV-2003 (first entry)
 XX
 DE Human MD27 scanning oligonucleotide SEQ ID 4548.
 XX
 KW Cytostatic; immunostimulant; gene therapy; vaccine; human;
 KW zinc finger protein; MD23; MD24; MD27; MD212; chromosome 7q22.1;
 KW chromosome 6p21.3-22.2; chromosome 16p11.2; chromosome 15q26.1; cancer;
 KW developmental disorder; ss.
 XX
 OS Homo sapiens.
 XX
 FN EPI281758-A2.
 XX
 PD 05-FEB-2003.
 XX
 PF 30-JUL-2002; 2002EP-00016874.
 XX
 PR 02-AUG-2001; 2001US-00922181.
 XX
 PA (AEOM-) AEOMICA INC.
 XX
 PI Shannon M, Gu Y, Nguyen C;
 XX
 DR WPI, 2003-423107/40.
 XX
 PT New zinc finger-containing proteins and nucleic acids, useful in
 PT manufacturing a medicament for treating or preventing a disorder
 PT associated with decreased or increased expression or activity of MD23,
 PT MD24, MD27 or MD212, e.g. cancer.
 XX
 PS Example 8; SEQ ID NO 4548; 103pp; English.
 CC The present invention relates to novel human zinc finger-containing
 CC proteins and their coding sequences: MD23, MD24, MD27, MD212. MD23 is

CC encoded at chromosome 7q22.1, MD24 is encoded at chromosome 6p21.3-22.2,
 CC MD27 is encoded at chromosome 16p11.2 and MD212 is encoded at chromosome
 CC 15q26.1. The MD23, MD24, MD27, and MD212 sequences are useful in therapy,
 CC or in manufacturing a medicament for treating or preventing a disorder
 CC associated with decreased or increased expression or activity of MD23,
 CC MD24, MD27, or MD212, e.g. cancer or developmental disorders. The nucleic
 CC acids and proteins are also useful for diagnosing or monitoring a disease
 CC caused by altered expression of MD23, MD24, MD27, or MD212. The nucleic
 CC acids can also be used as probes to detect and characterize gross
 CC alterations in MD23, MD24, MD27, or MD212 genetic loci. The probes are
 CC useful in constructing microarrays for measuring gene expression. The
 CC proteins are useful as therapeutic agents for gene therapy or as
 CC vaccines. The present sequence was used to illustrate the invention.
 CC
 SQ Sequence 17 BP; 4 A; 7 C; 4 G; 2 T; 0 U; 0 Other;
 Query Match 2.8%; Score 11.8; DB 1; Length 17;
 Best Local Similarity 86.7%; Pred. No. 5e+02;
 Matches 13; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
 QY 330 GCGAGTGCAGGCGC 344
 DB 16 GCGAGTGCAGGCGC 2
 RESULT 1083
 ADA99250/c
 ID ADA99250 standard; DNA; 17 BP.
 XX
 AC ADA99250;
 XX
 DT 20-NOV-2003 (first entry)
 XX
 DE Human MD23 scanning oligonucleotide SEQ ID 239.
 XX
 KW Cytostatic; immunostimulant; gene therapy; vaccine; human;
 KW zinc finger protein; MD23; MD24; MD27; MD212; chromosome 7q22.1;
 KW chromosome 6p21.3-22.2; chromosome 16p11.2; chromosome 15q26.1; cancer;
 KW developmental disorder; ss.
 XX
 OS Homo sapiens.
 XX
 FN EPI281758-A2.
 XX
 PD 05-FEB-2003.
 XX
 PF 30-JUL-2002; 2002EP-00016874.
 XX
 PR 02-AUG-2001; 2001US-00922181.
 XX
 PA (AEOM-) AEOMICA INC.
 XX
 PI Shannon M, Gu Y, Nguyen C;
 XX
 DR WPI, 2003-423107/40.
 XX
 PT New zinc finger-containing proteins and nucleic acids, useful in
 PT manufacturing a medicament for treating or preventing a disorder
 PT associated with decreased or increased expression or activity of MD23,
 PT MD24, MD27 or MD212, e.g. cancer.
 XX
 PS Example 8; SEQ ID NO 239; 103pp; English.
 CC The present invention relates to novel human zinc finger-containing
 CC proteins and their coding sequences: MD23, MD24, MD27, MD212. MD23 is
 CC encoded at chromosome 7q22.1, MD24 is encoded at chromosome 6p21.3-22.2,
 CC MD27 is encoded at chromosome 16p11.2 and MD212 is encoded at chromosome
 CC 15q26.1. The MD23, MD24, MD27, and MD212 sequences are useful in therapy,
 CC or in manufacturing a medicament for treating or preventing a disorder
 CC associated with decreased or increased expression or activity of MD23,
 CC MD24, MD27, or MD212, e.g. cancer or developmental disorders. The nucleic
 CC acids and proteins are also useful for diagnosing or monitoring a disease
 CC caused by altered expression of MD23, MD24, MD27, or MD212. The nucleic

```

XX acids can also be used as probes to detect and characterize gross
CC alterations in MD23, MD24, MD27, or MD212 genetic locus. The probes are
CC useful in constructing microarrays for measuring gene expression. The
CC proteins are useful as therapeutic agents for gene therapy or as
CC vaccines. The present sequence was used to illustrate the invention.
XX
SQ Sequence 17 BP; 4 A; 6 C; 3 G; 4 T; 0 U; 0 Other;
Query Match 2.8%; Score 11.8; DB 1; Length 17;
Best Local Similarity 86.7%; Pred. NO.55+02;
Matches 13; Conservative 0; Mismatches 2; Indels 0; Gaps 0.
QY 61 AGTCTCTGCACTACG 75
Db 16 AGTCTCTGCACTAGG 2
RESULT 1084
ADB02423
ID ADB02423 standard; DNA; 17 BP.
AC ADB02423;
XX ADB02423;
DT 20-NOV-2003 (first entry)
XX Human MD24 scanning oligonucleotide SEQ ID 3409.
DE Human MD24 scanning oligonucleotide SEQ ID 3409.
XX Cytostatic; immunostimulant; gene therapy; vaccine; human;
XX zinc finger protein; MD23; MD24; MD27; MD212; chromosome 7q22.1;
XX chromosome 6p11.3-22.2; chromosome 16p11.2; chromosome 15q26.1; cancer;
XX developmental disorder; ss.
XX
XX Homo sapiens.
OS
XX
XX EP1281758-A2.
FN
XX
XX 05-FEB-2003.
PD
XX
XX 30-JUL-2002; 2002EP-00016874.
PF
XX
XX 02-AUG-2001; 2001US-00922181.
PR
XX
XX (ABOM-) ABOMICA INC.
PA
XX
XX Shannon M, Gu Y, Nguyen C;
PI
XX
XX WPI, 2003-423107/40.
DR
XX
XX New zinc finger-containing proteins and nucleic acids, useful in
PT manufacturing a medicament for treating or preventing a disorder
PT associated with decreased or increased expression or activity of MD23,
PT MD24, MD27 or MD212, e.g. cancer.
PT
XX
XX Example 8; SEQ ID NO 3409; 103bp; English.
PS
XX
XX The present invention relates to novel human zinc finger-containing
XX proteins and their coding sequences: MD23, MD24, MD27, MD212. MD23 is
XX encoded at chromosome 7q22.1, MD24 is encoded at chromosome 6p21.3-22.2,
XX MD27 is encoded at chromosome 16p11.2 and MD212 is encoded at chromosome
XX 15q26.1. The MD23, MD24, MD27, and MD212 sequences are useful in therapy,
XX or in manufacturing a medicament for treating or preventing a disorder,
XX associated with decreased or increased expression or activity of MD23,
XX MD24, MD27, or MD212, e.g. cancer or developmental disorders. The nucleic
XX acids and proteins are also useful for diagnosing or monitoring a disease
XX caused by altered expression of MD23, MD24, MD27, or MD212. The nucleic
XX acids can also be used as probes to detect and characterize gross
XX alterations in MD23, MD24, MD27, or MD212 genetic locus. The probes are
XX useful in constructing microarrays for measuring gene expression. The
XX proteins are useful as therapeutic agents for gene therapy or as
XX vaccines. The present sequence was used to illustrate the invention.
XX
SQ Sequence 17 BP; 2 A; 7 C; 2 G; 6 T; 0 U; 0 Other;

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Query Match	2.8%;	Score 11.8;	DB 1;	Length 17;
Best Local Similarity	86.7%;	Pred. No. 5e+02;		
Matches 13;	Conservative 0;	Mismatches 2;	Indels 0;	Gaps 0
QY	363	TTCTCTCACTTTCCTG	377	
DB	1	TTCTCTCACTATTCCTG	15	
RESULT 1085				
ADB03563/c	ID	ADB03563 standard; DNA; 17 BP.		
XX	ADB03563;			
XX	20-NOV-2003	(first entry)		
XX	Human MD27 scanning oligonucleotide SEQ ID 4549.			
DE	Cytostatic; immunostimulant; gene therapy; vaccine; human;			
KW	zinc finger protein; MD23; MD24; MD27; MD212; chromosome 7q22.1;			
KW	chromosome 6p21.3-22.2; chromosome 16p11.2; chromosome 15q26.1; cancer;			
XX	developmental disorder; ss.			
OS	Homo sapiens.			
XX	EP1281758-A2.			
PN	05-FEB-2003.			
PD	30-JUL-2002; 2002EP-00016874.			
PF	02-AUG-2001; 2001US-00922181.			
PR	(ABOM-) AEOMICA INC.			
PA	Shannon M, Gu Y, Nguyen C;			
PI	WPI; 2003-423107/40.			
XX	New zinc finger-containing proteins and nucleic acids, useful in			
XX	manufacturing a medicament for treating or preventing a disorder			
XX	associated with decreased or increased expression or activity of MD23,			
XX	MD24, MD27 or MD212, e.g. cancer.			
XX	Example 8; SEQ ID NO 4549; 103pp; English.			
XX	The present invention relates to novel human zinc finger-containing			
CC	proteins and their coding sequences: MD23, MD24, MD27, MD212. MD23 is			
CC	encoded at chromosome 7q22.1, MD24 is encoded at chromosome 6p21.3-22.2,			
CC	MD27 is encoded at chromosome 16p11.2 and MD212 is encoded at chromosome			
CC	15q26.1. The MD23, MD24, MD27, and MD212 sequences are useful in therapy,			
CC	or in manufacturing a medicament for treating or preventing a disorder			
CC	associated with decreased or increased expression or activity of MD23			
CC	MD24, MD27, or MD212, e.g. cancer or developmental disorders. The nucleic			
CC	acids and proteins are also useful for diagnosing or monitoring a disease			
CC	caused by altered expression of MD23, MD24, MD27, or MD212. The nucleic			
CC	acids can also be used as probes to detect and characterize gross			
CC	alterations in MD23, MD24, MD27, or MD212 genetic locus. The probes are			
CC	useful in constructing microarrays for measuring gene expression. The			
CC	proteins are useful as therapeutic agents for gene therapy or as			
CC	vaccines. The present sequence was used to illustrate the invention.			
XX	Sequence 17 BP; 3 A; 7 C; 4 G; 3 T; 0 U; 0 Other;			
QY	Query Match	2.8%;	Score 11.8;	DB 1;
DB	Best Local Similarity	86.7%;	Pred. No. 5e+02;	
DB	Matches 13;	Conservative 0;	Mismatches 2;	Indels 0;
DB	330	GCGGACGACCCAGGGC	344	
DB	15	GCGGATGTCAGGGC	1	

```

RESULT 1086
ADA99409
ID ADA99409 standard; DNA; 17 BP.
XX
XX ADA99409;
AC
XX 20-NOV-2003 (first entry)
DT
XX Human MD23 scanning oligonucleotide SEQ ID 398.
DE
XX
XX Cytostatic; immunostimulant; gene therapy; vaccine; human;
KM zinc finger protein; MD23; MD24; MD27; MD212; chromosome 7q22.1;
KM chromosome 6p21.3-22.2; chromosome 16p11.2; chromosome 15q26.1; cancer;
KM developmental disorder; ss.
XX
XX Homo sapiens.
OS
XX EP1281758-A2.
PN
XX 05-FEB-2003.
PD
XX 30-JUL-2002; 2002EP-00016874.
PF
XX 02-AUG-2001; 2001US-00922181.
PR
XX (AEOM-) AEOMICA INC.
PA
XX Shannon M, Gu Y, Nguyen C;
PI
XX WPI; 2003-423107/40.
DR
XX
XX New zinc finger-containing proteins and nucleic acids, useful in
PT manufacturing a medicament for treating or preventing a disorder
PT associated with decreased or increased expression or activity of MD23,
PT MD24, MD27 or MD212, e.g. cancer.
XX
XX Example 8; SEQ ID NO 398; 103bp; English.
XX
XX The present invention relates to novel human zinc finger-containing
CC proteins and their coding sequences; MD23, MD24, MD27, MD212. MD23 is
CC encoded at chromosome 7q22.1, MD24 is encoded at chromosome 6p21.3-22.2,
CC MD27 is encoded at chromosome 16p11.2 and MD212 is encoded at chromosome
CC 15q26.1. The MD23, MD24, MD27, and MD212 sequences are useful in therapy,
CC or in manufacturing a medicament for treating or preventing a disorder,
CC associated with decreased or increased expression or activity of MD23,
CC MD24, MD27, or MD212, e.g. cancer or developmental disorders. The nucleic
CC acids and proteins are also useful for diagnosing or monitoring a disease
CC caused by altered expression of MD23, MD24, MD27, or MD212. The nucleic
CC acids can also be used as probes to detect and characterize gross
CC alterations in MD23, MD24, MD27, or MD212 genetic locus. The probes are
CC useful in constructing microarrays for measuring gene expression. The
CC proteins are useful as therapeutic agents for gene therapy or as
CC vaccines. The present sequence was used to illustrate the invention.
XX
XX Sequence 17 BP; 3 A; 7 C; 2 G; 5 T; 0 U; 0 Other;
SQ
Query Match 2.8%; Score 11.8; DB 1; Length 17;
Best Local Similarity 86.7%; Pred. No. 5e+02;
Matches 13; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY 361 ACTGCGACACTTCC 375
DB 3 AGTCTCATCATCC 17

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```

XX
XX Human MD27 scanning oligonucleotide SEQ ID 4547.
DE
XX
XX Cytostatic; immunostimulant; gene therapy; vaccine; human;
KM zinc finger protein; MD23; MD24; MD27; MD212; chromosome 7q22.1;
KM chromosome 6p21.3-22.2; chromosome 16p11.2; chromosome 15q26.1; cancer;
KM developmental disorder; ss.
XX
XX Homo sapiens.
OS
XX EP1281758-A2.
PN
XX 05-FEB-2003.
PD
XX 30-JUL-2002; 2002EP-00016874.
PF
XX 02-AUG-2001; 2001US-00922181.
PR
XX (AEOM-) AEOMICA INC.
PA
XX Shannon M, Gu Y, Nguyen C;
PI
XX WPI; 2003-423107/40.
DR
XX
XX New zinc finger-containing proteins and nucleic acids, useful in
PT manufacturing a medicament for treating or preventing a disorder
PT associated with decreased or increased expression or activity of MD23,
PT MD24, MD27 or MD212, e.g. cancer.
XX
XX Example 8; SEQ ID NO 4547; 103bp; English.
XX
XX The present invention relates to novel human zinc finger-containing
CC proteins and their coding sequences; MD23, MD24, MD27, MD212. MD23 is
CC encoded at chromosome 7q22.1, MD24 is encoded at chromosome 6p21.3-22.2,
CC MD27 is encoded at chromosome 16p11.2 and MD212 is encoded at chromosome
CC 15q26.1. The MD23, MD24, MD27, and MD212 sequences are useful in therapy,
CC or in manufacturing a medicament for treating or preventing a disorder,
CC associated with decreased or increased expression or activity of MD23,
CC MD24, MD27, or MD212, e.g. cancer or developmental disorders. The nucleic
CC acids and proteins are also useful for diagnosing or monitoring a disease
CC caused by altered expression of MD23, MD24, MD27, or MD212. The nucleic
CC acids can also be used as probes to detect and characterize gross
CC alterations in MD23, MD24, MD27, or MD212 genetic locus. The probes are
CC useful in constructing microarrays for measuring gene expression. The
CC proteins are useful as therapeutic agents for gene therapy or as
CC vaccines. The present sequence was used to illustrate the invention.
XX
XX Sequence 17 BP; 4 A; 7 C; 4 G; 2 T; 0 U; 0 Other;
SQ
Query Match 2.8%; Score 11.8; DB 1; Length 17;
Best Local Similarity 86.7%; Pred. No. 5e+02;
Matches 13; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY 330 GCGAGACACGAGGC 344
DB 17 GCGAGTCTCAGGC 3

```

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RESULT 1087
ADB03561/c
ID ADB03561 standard; DNA; 17 BP.
XX
XX ADB03561;
AC
XX 20-NOV-2003 (first entry)
DT

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RESULT 1088
ABZ61741/c
ID ABZ61741 standard; RNA; 17 BP.
XX
XX ABZ61741;
AC
XX 21-MAR-2003 (first entry)
DT
XX Human H-Ras DNAzyme target #532.
DE
XX Human; ribozyme; short interfering RNA; siRNA; HER2; K-Ras;
KM enzymatic nucleic acid; H-Ras; N-Ras; HIV; cytostatic; anti-HIV;
KM anti-rheumatic; cancer; AIDS; ss.
XX
XX Homo sapiens.
OS

```

```

XX      WO200297114-A2.
FN      XX
XX      PD
XX      05-DEC-2002.
XX      PF
XX      29-MAY-2002; 2002WO-US016840.
XX      PR
XX      29-MAY-2001; 2001US-0294140P.
XX      PR
XX      06-JUN-2001; 2001US-0296249P.
XX      PR
XX      10-SEP-2001; 2001US-0318471P.
XX      PA
XX      (RIBO-) RIBOZYME PHARM INC.
XX      PI
XX      Mcswiggen J;
XX      DR
XX      WPI; 2003-140484/13.
XX      PT
XX      Novel short interfering RNA and enzymatic nucleic acid useful for
XX      treating cancer, modulates the expression of a nucleic acid encoding
XX      HER2, K-Ras, H-Ras, N-Ras, and human deficiency virus sequences.
XX      PS
XX      Claim 58; Page 121; 185pp; English.
XX      CC
XX      The invention relates to a novel short interfering RNA (siRNA) nucleic
XX      acid molecule or an enzymatic nucleic acid molecule, that modulates
XX      expression of a nucleic acid molecule encoding HER2, K-Ras, H-Ras, N-Ras,
XX      human immunodeficiency virus (HIV) or a component of HIV. The nucleic
XX      acid molecule of the invention has cytostatic, anti-HIV, and anti-
XX      rheumatic activity. The nucleic acid molecules are useful for reducing
XX      HER2, K-Ras, H-Ras, and HIV activity in a cell. The nucleic acids are
XX      also useful for treating breast, ovarian, colorectal, lung, prostate,
XX      bladder, or pancreatic cancer, and HIV infection, and AIDS. The sequences
XX      shown in AB259889 - AB262216, AB264544 - AB265531, AB266520 - AB266524,
XX      AB266530 - AB266585 represent substrate/target sequences for the human
XX      ribozymes of the invention
XX      SQ
XX      Sequence 17 BP; 2 A; 7 C; 5 G; 0 T; 3 U; 0 Other;
XX
XX      Query Match      2.8%; Score 11.8; DB 1; Length 17;
XX      Best Local Similarity 86.7%; Pred. No. 5e+02; 2; Indels 0; Gaps 0;
XX      Matches 13; Conservative 0; Mismatches 2;
XX
XX      OY      237 GGAGGCTGCTGCCG 251
XX      DB      17 GGAGGCTGCTGACCG 3
XX
XX      RESULT 1089
XX      AB265141
XX      ID      AB265141 standard; RNA; 17 BP.
XX      AC      AB265141;
XX      DT      21-MAR-2003 (first entry)
XX      DE      Human HER2 DNAzyme substrate #598.
XX      KW      Human; ribozyme; short interfering RNA; siRNA; HER2; K-Ras;
XX      KW      enzymatic nucleic acid; H-Ras; N-Ras; HIV; cytostatic; anti-HIV;
XX      KW      anti-rheumatic; cancer; AIDS; ss.
XX      OS      Homo sapiens.
XX      PA      WO200297114-A2.
XX      PN      WO200297114-A2.
XX      PD      05-DEC-2002.
XX      PF      29-MAY-2002; 2002WO-US016840.
XX      PR      29-MAY-2001; 2001US-0294140P.
XX      PR      06-JUN-2001; 2001US-0296249P.
XX      PR      10-SEP-2001; 2001US-0318471P.
XX      PS

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```

PA      (RIBO-) RIBOZYME PHARM INC.
XX      PI
XX      Mcswiggen J;
XX      DR
XX      WPI; 2003-140484/13.
XX      PT
XX      Novel short interfering RNA and enzymatic nucleic acid useful for
XX      treating cancer, modulates the expression of a nucleic acid encoding
XX      HER2, K-Ras, H-Ras, N-Ras, and human deficiency virus sequences.
XX      PS
XX      Claim 4; Page 144; 185pp; English.
XX      CC
XX      The invention relates to a novel short interfering RNA (siRNA) nucleic
XX      acid molecule or an enzymatic nucleic acid molecule, that modulates
XX      expression of a nucleic acid molecule encoding HER2, K-Ras, H-Ras, N-Ras,
XX      human immunodeficiency virus (HIV) or a component of HIV. The nucleic
XX      acid molecule of the invention has cytostatic, anti-HIV, and anti-
XX      rheumatic activity. The nucleic acid molecules are useful for reducing
XX      HER2, K-Ras, H-Ras, and HIV activity in a cell. The nucleic acids are
XX      also useful for treating breast, ovarian, colorectal, lung, prostate,
XX      bladder, or pancreatic cancer, and HIV infection, and AIDS. The sequences
XX      shown in AB259889 - AB262216, AB264544 - AB265531, AB266520 - AB266524,
XX      AB266530 - AB266585 represent substrate/target sequences for the human
XX      ribozymes of the invention
XX      SQ
XX      Sequence 17 BP; 3 A; 4 C; 7 G; 0 T; 3 U; 0 Other;
XX
XX      Query Match      2.8%; Score 11.8; DB 1; Length 17;
XX      Best Local Similarity 73.3%; Pred. No. 5e+02; 2; Indels 0; Gaps 0;
XX      Matches 11; Conservative 2; Mismatches 2;
XX
XX      OY      261 ACGGTCACCTGAG 275
XX      DB      1 ACGGTCACCTGAG 15
XX
XX      RESULT 1090
XX      AB264812
XX      ID      AB264812 standard; RNA; 17 BP.
XX      AC      AB264812;
XX      DT      21-MAR-2003 (first entry)
XX      DE      Human HER2 DNAzyme substrate #269.
XX      KW      Human; ribozyme; short interfering RNA; siRNA; HER2; K-Ras;
XX      KW      enzymatic nucleic acid; H-Ras; N-Ras; HIV; cytostatic; anti-HIV;
XX      KW      anti-rheumatic; cancer; AIDS; ss.
XX      OS      Homo sapiens.
XX      PA      WO200297114-A2.
XX      PN      WO200297114-A2.
XX      PD      05-DEC-2002.
XX      PF      29-MAY-2002; 2002WO-US016840.
XX      PR      29-MAY-2001; 2001US-0294140P.
XX      PR      06-JUN-2001; 2001US-0296249P.
XX      PR      10-SEP-2001; 2001US-0318471P.
XX      PS
XX      (RIBO-) RIBOZYME PHARM INC.
XX      PI
XX      Mcswiggen J;
XX      DR
XX      WPI; 2003-140484/13.
XX      PT
XX      Novel short interfering RNA and enzymatic nucleic acid useful for
XX      treating cancer, modulates the expression of a nucleic acid encoding
XX      HER2, K-Ras, H-Ras, N-Ras, and human deficiency virus sequences.
XX      PS
XX      Claim 4; Page 138; 185pp; English.

```

XX The invention relates to a novel short interfering RNA (siRNA) nucleic acid molecule or an enzymatic nucleic acid molecule, that modulates expression of a nucleic acid molecule encoding HER2, K-Ras, H-Ras, N-Ras, human immunodeficiency virus (HIV) or a component of HIV. The nucleic acid molecule of the invention has cytosstatic, anti-HIV, and anti-rheumatic activity. The nucleic acid molecules are useful for reducing HER2, K-Ras, H-Ras, and HIV activity in a cell. The nucleic acids are also useful for treating breast, ovarian, colorectal, lung, prostate, bladder, or pancreatic cancer, and HIV infection, and AIDS. The sequences shown in ABZ5989 - ABZ62216, ABZ64544 - ABZ65531, ABZ6520 - ABZ6524, ribozymes of the invention

SO Sequence 17 BP; 6 A; 2 C; 7 G; 0 T; 2 U; 0 Other;

Query Match 2.8%; Score 11.8; DB 1; Length 17;
Best Local Similarity 80.0%; Pred. No. 5e+02; Mismatches 2; Indels 0; Gaps 0;

DB 2 GGTGAAGCAGAGAA 217
2 GGUGACGCGACAGGA 16

RESULT 1091
ABZ61416
ID ABZ61416 standard; RNA; 17 BP.
XX ABZ61416;
AC 21-MAR-2003 (first entry)
XX
XX Human H-Ras DNAzyme target #207.
DE
XX
XX Human; ribozyme; short interfering RNA; siRNA; HER2; K-Ras; enzymatic nucleic acid; H-Ras; N-Ras; HIV; cytosstatic; anti-HIV; anti-rheumatic; cancer; AIDS; ss.
XX
XX Homo sapiens.
OS
XX
XX WO200297114-A2.
PN
XX
XX 05-DEC-2002.
PD
XX
XX 29-MAY-2002; 2002WO-US016840.
PF
XX
XX 29-MAY-2001; 2001US-0294140P.
PR
XX
XX 06-JUN-2001; 2001US-0296249P.
PR
XX
XX 10-SEP-2001; 2001US-0318471P.
PR
XX
XX (RIBO-) RIBOZYME PHARM INC.
PA
XX
XX Mcswiggen J;
PI
XX
XX WPI; 2003-140484/13.
DR
XX
XX Novel short interfering RNA and enzymatic nucleic acid useful for treating cancer, modulates the expression of a nucleic acid encoding HER2, K-Ras, H-Ras, N-Ras, and human deficiency virus sequences.
PT
XX
XX Claim 58; Page 115; 185pp; English.

XX The invention relates to a novel short interfering RNA (siRNA) nucleic acid molecule or an enzymatic nucleic acid molecule, that modulates expression of a nucleic acid molecule encoding HER2, K-Ras, H-Ras, N-Ras, human immunodeficiency virus (HIV) or a component of HIV. The nucleic acid molecule of the invention has cytosstatic, anti-HIV, and anti-rheumatic activity. The nucleic acid molecules are useful for reducing HER2, K-Ras, H-Ras, and HIV activity in a cell. The nucleic acids are also useful for treating breast, ovarian, colorectal, lung, prostate, bladder, or pancreatic cancer, and HIV infection, and AIDS. The sequences shown in ABZ5989 - ABZ62216, ABZ64544 - ABZ65531, ABZ6520 - ABZ6524, ribozymes of the invention

CC ABZ6530 - ABZ6585 represent substrate/target sequences for the human ribozymes of the invention

SO Sequence 17 BP; 2 A; 8 C; 7 G; 0 T; 0 U; 0 Other;

Query Match 2.8%; Score 11.8; DB 1; Length 17;
Best Local Similarity 86.7%; Pred. No. 5e+02; Mismatches 2; Indels 0; Gaps 0;

DB 250 CGGCTCGGCGACGG 264
1 CGGCGCGGCGCACGG 15

RESULT 1092
ABZ61329
ID ABZ61329 standard; RNA; 17 BP.
XX ABZ61329;
AC 21-MAR-2003 (first entry)
XX
XX Human H-Ras DNAzyme target #120.
DE
XX
XX Human; ribozyme; short interfering RNA; siRNA; HER2; K-Ras; enzymatic nucleic acid; H-Ras; N-Ras; HIV; cytosstatic; anti-HIV; anti-rheumatic; cancer; AIDS; ss.
XX
XX Homo sapiens.
OS
XX
XX WO200297114-A2.
PN
XX
XX 05-DEC-2002.
PD
XX
XX 29-MAY-2002; 2002WO-US016840.
PF
XX
XX 29-MAY-2001; 2001US-0294140P.
PR
XX
XX 06-JUN-2001; 2001US-0296249P.
PR
XX
XX 10-SEP-2001; 2001US-0318471P.
PR
XX
XX (RIBO-) RIBOZYME PHARM INC.
PA
XX
XX Mcswiggen J;
PI
XX
XX WPI; 2003-140484/13.
DR
XX
XX Novel short interfering RNA and enzymatic nucleic acid useful for treating cancer, modulates the expression of a nucleic acid encoding HER2, K-Ras, H-Ras, N-Ras, and human deficiency virus sequences.
PT
XX
XX Claim 58; Page 113; 185pp; English.

XX The invention relates to a novel short interfering RNA (siRNA) nucleic acid molecule or an enzymatic nucleic acid molecule, that modulates expression of a nucleic acid molecule encoding HER2, K-Ras, H-Ras, N-Ras, human immunodeficiency virus (HIV) or a component of HIV. The nucleic acid molecule of the invention has cytosstatic, anti-HIV, and anti-rheumatic activity. The nucleic acid molecules are useful for reducing HER2, K-Ras, H-Ras, and HIV activity in a cell. The nucleic acids are also useful for treating breast, ovarian, colorectal, lung, prostate, bladder, or pancreatic cancer, and HIV infection, and AIDS. The sequences shown in ABZ5989 - ABZ62216, ABZ64544 - ABZ65531, ABZ6520 - ABZ6524, ribozymes of the invention

SO Sequence 17 BP; 0 A; 10 C; 6 G; 0 T; 1 U; 0 Other;

Query Match 2.8%; Score 11.8; DB 1; Length 17;
Best Local Similarity 80.0%; Pred. No. 5e+02; Mismatches 2; Indels 0; Gaps 0;

DB 250 CGGCTCGGCGACGG 264
1 CGGCGCGGCGCACGG 15

Db 1 CGGCCUUGGCCCGG 15

RESULT 1093
AB261742/c
ID AB261742 standard; RNA; 17 BP.
XX
AC AB261742;
XX
DT 21-MAR-2003 (first entry)
XX
DE Human H-Ras DNAzyme target #533.
XX
KW Human; ribozyme; short interfering RNA; siRNA; HRR2; K-Ras;
KW enzymatic nucleic acid; H-Ras; N-Ras; HIV; cytosolic; anti-HIV;
KW anti-rheumatic; cancer; AIDS; ss.
XX
OS Homo sapiens.
XX
PN WO200297114-A2.
XX
PD 05-DEC-2002.
XX
PR 29-MAY-2002; 2002MO-US016840.
XX
PR 29-MAY-2001; 2001US-0294140P.
PR 06-JUN-2001; 2001US-0296249P.
PR 10-SEP-2001; 2001US-0318471P.
XX
PA (RIBO-) RIBOZYME PHARM INC.
XX
PI McSwiggen J;
XX
DR WPI; 2003-140484/13.
XX
PT Novel short interfering RNA and enzymatic nucleic acid useful for
PT treating cancer, modulates the expression of a nucleic acid encoding
PT HRR2, K-Ras, H-Ras, N-Ras, and human deficiency virus sequences.
XX
PS Claim 58; Page 121; 185pp; English.
XX
CC The invention relates to a novel short interfering RNA (siRNA) nucleic
CC acid molecule or an enzymatic nucleic acid molecule, that modulates
CC expression of a nucleic acid molecule encoding HRR2, K-Ras, H-Ras, N-Ras;
CC human immunodeficiency virus (HIV) or a component of HIV. The nucleic
CC acid molecule of the invention has cytosolic, anti-HIV, and anti-
CC rheumatic activity. The nucleic acid molecules are useful for reducing
CC HRR2, K-Ras, H-Ras, and HIV activity in a cell. The nucleic acids are
CC also useful for treating breast, ovarian, colorectal, lung, prostate,
CC bladder, or pancreatic cancer, and HIV infection, and AIDS. The sequences
CC shown in AB259889 - AB262216, AB264544 - AB265531, AB265520 - AB265524,
CC AB265530 - AB265585 represent substrate/target sequences for the human
CC ribozymes of the invention
XX
SQ Sequence 17 BP; 2 A; 7 C; 4 G; 0 T; 4 U; 0 Other;
XX

Query Match 2.8%; Score 11.8; DB 1; Length 17;
Best Local Similarity 86.7%; Pred. No. 5e+02;
Matches 13; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 236 GGGAGGCTGCTTCCC 250
Db 15 GGGAGGCTGCTGACC 1

RESULT 1094
ACD60765/c
ID ACD60765 standard; RNA; 17 BP.
XX
AC ACD60765;
XX
DT 24-SEP-2003 (first entry)
XX

DE HCV DNAzyme substrate sequence #2007.
XX
KW Nucleic acid molecule; Hepatitis C virus; HCV; Hepatitis B virus; HBV;
KW RNA stability; RNA expression; RNA synthesis; antisense;
KW enzymatic nucleic acid; hammerhead ribozyme; DNAzyme; inozyme; zinzyme;
KW amberzyme; G-cleaver ribozyme; decoy molecule; aptamer;
KW HBV reverse transcriptase; Enhancer I region; viral replication;
KW degenerative; disease state; HBV infection; HCV infection; cirrhosis;
KW liver failure; hepatocellular carcinoma; hepatotropic; cytostatic;
KW vincristine; antiinflammatory; substrate; ss.
XX
OS Hepatitis C virus.
XX
PN WO200281494-A1.
XX
PD 17-OCT-2002.
XX
PR 26-MAR-2002; 2002MO-US009187.
XX
PR 26-MAR-2001; 2001US-00817979.
PR 08-JUN-2001; 2001US-00877478.
PR 08-JUN-2001; 2001US-0296876P.
PR 24-OCT-2001; 2001US-0335059P.
PR 05-DEC-2001; 2001US-0337055P.
XX
PA (RIBO-) RIBOZYME PHARM INC.
PA (BLAT/) BLATT L.
PA (MACE/) MACEJAK D.
PA (MOSW/) MOSWIGGEN J.
PA (MORR/) MORRISSEY D.
PA (PANC/) PAVCO P.
PA (LEER/) LEE P.
PA (DRAP/) DRAPER K.
PA (ROBE/) ROBERTS E.
XX
PI Blact L, Macejak D, McSwiggen J, Morrissey D, Pavco P, Lee P;
PI Draper K, Roberts E;
XX
DR WPI; 2003-229207/22.
XX
PT Novel compound useful for treating cirrhosis, liver failure,
PT hepatocellular carcinoma, or condition associated with hepatitis C virus
PT infection.
XX
PS Claim 1; Page 269; 387pp; English.
XX
CC The present invention relates to nucleic acid molecules which modulate
CC the synthesis, expression and/or stability of Hepatitis C virus (HCV) or
CC Hepatitis B virus (HBV) RNA. The nucleic acid molecules include antisense
CC and enzymatic nucleic acids such as hammerhead ribozymes, DNAzymes,
CC inozymes, zinzymes, amberzymes, and G-cleaver ribozymes. Also disclosed
CC are nucleic acid decoy molecules and aptamers that bind to HBV reverse
CC transcriptase and/or HBV reverse transcriptase primer sequences, as well
CC as oligonucleotides that specifically bind the Enhancer I region of HBV
CC DNA. The nucleic acids may be used to modulate the expression of HBV
CC genes and HBV viral replication. Also disclosed is a method for screening
CC compounds and/or potential therapies directed against HBV, and compounds
CC that modulate the expression and/or replication of HCV. The compounds and
CC methods of the invention are useful for the treatment of degenerative and
CC disease states related to HBV and HCV infection, replication and gene
CC expression such as cirrhosis, liver failure, and hepatocellular
CC carcinoma. The present sequence represents a substrate for one of the HCV
CC DNAzyme or minus strand DNAzyme sequences disclosed in the present
CC invention
XX
SQ Sequence 17 BP; 2 A; 6 C; 4 G; 0 T; 5 U; 0 Other;
XX

Query Match 2.8%; Score 11.8; DB 1; Length 17;
Best Local Similarity 86.7%; Pred. No. 5e+02;
Matches 13; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 11 GAAACTGCGGCTGAC 25
Db 11 GAAACTGCGGCTGAC 25

Db 16 GAAACAGCGGCTC 2

RESULT 1095
ACD57732
ID ACD57732 standard; RNA, 17 BP.
XX
AC ACD57732;
XX
DT 23-SEP-2003 (first entry)
XX
DE HCV DNAzyme substrate sequence #486.
XX
KM Nucleic acid molecule; Hepatitis C virus; HCV; Hepatitis B virus; HBV;
KM RNA stability; RNA expression; RNA synthesis; antisense;
KM enzymatic nucleic acid; hammerhead ribozyme; DNAzyme; inozyme; zinzyme;
KM amberzyme; G-cleaver ribozyme; decoy molecule; aptamer;
KM HBV reverse transcriptase; Enhancer I region; viral replication;
KM degenerative; disease state; HBV infection; HCV infection; cirrhosis;
KM liver failure; hepatocellular carcinoma; hepatotropic; cytostatic;
KM virucide; antiinflammatory; substrate; ss.
XX
OS Hepatitis C virus.
XX
FN WO200281494-A1.
XX
PD 17-OCT-2002.
XX
PF 26-MAR-2002; 2002WO-US009187.
XX
XX 26-MAR-2001; 2001US-00817879.
PR 08-JUN-2001; 2001US-00877478.
PR 08-JUN-2001; 2001US-0296876P.
PR 24-OCT-2001; 2001US-0335059P.
PR 05-DEC-2001; 2001US-0337055P.
XX
PA (RIBO-) RIBOZYME PHARM INC.
PA (BLAT/) BLATT L.
PA (MACE/) MACEJAK D.
PA (MCSW/) MCSWIGGEN J.
PA (MORR/) MORRISSEY D.
PA (PAVC/) PAVCO P.
PA (LEEP/) LEE P.
PA (DRAP/) DRAPER K.
PA (ROBE/) ROBERTS E.
PI Blatt L, Macejak D, Mcswigen J, Morrissey D, Pavco P, Lee P,
PI Draper K, Roberts E;
XX WPI; 2003-229207/22.
XX
PT Novel compound useful for treating cirrhosis, liver failure,
PT hepatocellular carcinoma, or condition associated with hepatitis C virus
PT infection.
XX
PS Claim 1; Page 242; 387pp; English.
XX
CC The present invention relates to nucleic acid molecules which modulate
CC the synthesis, expression and/or stability of Hepatitis C virus (HCV) or
CC Hepatitis B virus (HBV) RNA. The nucleic acid molecules include antisense
CC and enzymatic nucleic acids such as hammerhead ribozymes, DNAzymes,
CC inozymes, zinzymes, amberzymes, and G-cleaver ribozymes. Also disclosed
CC are nucleic acid decoy molecules and aptamers that bind to HBV reverse
CC transcriptase and/or HBV reverse transcriptase primer sequences, as well
CC as oligonucleotides that specifically bind the Enhancer I region of HBV
CC DNA. The nucleic acids may be used to modulate the expression of HBV
CC genes and HBV viral replication. Also disclosed is a method for screening
CC compounds and/or potential therapies directed against HBV, and compounds
CC that modulate the expression and/or replication of HCV. The compounds and
CC methods of the invention are useful for the treatment of degenerative and
CC disease states related to HBV and HCV infection, replication and gene
CC expression such as cirrhosis, liver failure, and hepatocellular
CC carcinoma. The present sequence represents a substrate for one of the HCV

CC DNAzyme or minus strand DNAzyme sequences disclosed in the present
CC invention
XX
SQ Sequence 17 BP; 3 A; 7 C; 7 G; 0 T; 0 U; 0 Other;
XX
Query Match 2.8%; Score 11.8; DB 1; Length 17;
Best Local Similarity 86.7%; Pred. NO. 5e+02;
Matches 13; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
XX
QY 108 CGCAGCGGCGCAG 122
DB 2 CGCGGCGCGCGCAG 16
XX
RESULT 1096
ACD63967
ID ACD63967 standard; RNA; 17 BP.
XX
AC ACD63967;
XX
DT 30-SEP-2003 (first entry)
XX
DE HCV minus strand DNAzyme substrate sequence #1326.
XX
KM Nucleic acid molecule; Hepatitis C virus; HCV; Hepatitis B virus; HBV;
KM RNA stability; RNA expression; RNA synthesis; antisense; inozyme;
KM enzymatic nucleic acid; hammerhead ribozyme; DNAzyme; zinzyme;
KM amberzyme; G-cleaver ribozyme; decoy molecule; aptamer;
KM HBV reverse transcriptase; Enhancer I region; viral replication;
KM degenerative; disease state; HBV infection; HCV infection; cirrhosis;
KM liver failure; hepatocellular carcinoma; hepatotropic; cytostatic;
KM virucide; antiinflammatory; substrate; ss.
XX
OS Hepatitis C virus.
XX
FN WO200281494-A1.
XX
PD 17-OCT-2002.
XX
PF 26-MAR-2002; 2002WO-US009187.
XX
XX 26-MAR-2001; 2001US-00817879.
PR 08-JUN-2001; 2001US-00877478.
PR 08-JUN-2001; 2001US-0296876P.
PR 24-OCT-2001; 2001US-0335059P.
PR 05-DEC-2001; 2001US-0337055P.
XX
PA (RIBO-) RIBOZYME PHARM INC.
PA (BLAT/) BLATT L.
PA (MACE/) MACEJAK D.
PA (MCSW/) MCSWIGGEN J.
PA (MORR/) MORRISSEY D.
PA (PAVC/) PAVCO P.
PA (LEEP/) LEE P.
PA (DRAP/) DRAPER K.
PA (ROBE/) ROBERTS E.
PI Blatt L, Macejak D, Mcswigen J, Morrissey D, Pavco P, Lee P,
PI Draper K, Roberts E;
XX WPI; 2003-229207/22.
XX
PT Novel compound useful for treating cirrhosis, liver failure,
PT hepatocellular carcinoma, or condition associated with hepatitis C virus
PT infection.
XX
PS Claim 1; Page 298; 387pp; English.
XX
CC The present invention relates to nucleic acid molecules which modulate
CC the synthesis, expression and/or stability of Hepatitis C virus (HCV) or
CC Hepatitis B virus (HBV) RNA. The nucleic acid molecules include antisense
CC and enzymatic nucleic acids such as hammerhead ribozymes, DNAzymes,
CC inozymes, zinzymes, amberzymes, and G-cleaver ribozymes. Also disclosed

CC are nucleic acid decoy molecules and aptamers that bind to HBV reverse
 CC transcriptase and/or HBV reverse transcriptase primer sequences, as well
 CC as oligonucleotides that specifically bind the Enhancer I region of HBV
 CC DNA. The nucleic acids may be used to modulate the expression of HBV
 CC genes and HBV viral replication. Also disclosed is a method for screening
 CC compounds and/or potential therapies directed against HBV, and compounds
 CC that modulate the expression and/or replication of HCV. The compounds and
 CC methods of the invention are useful for the treatment of degenerative and
 CC disease states related to HBV and HCV infection, replication and gene
 CC expression such as cirrhosis, liver failure, and hepatocellular
 CC carcinoma. The present sequence represents a substrate for one of the HCV
 CC DNAzyme or minus strand DNAzyme sequences disclosed in the present
 CC invention
 CC
 SQ Sequence 17 BP; 5 A; 6 C; 4 G; 0 T; 1 U; 0 Other;
 Query Match 2.8%; Score 11.8; DB 1; Length 17;
 Best Local Similarity 80.0%; Pred. No. 5e+02; Mismatches 1; Indels 0; Gaps 0;
 Matches 12; Conservative 1; Mismatches 2; Indels 0; Gaps 0;
 QY 39 GAAGATGCCACAC 53
 Db 3 GAAGATGCCACAC 17
 RESULT 1097
 ACD58702/C
 ID ACD58702 standard; RNA; 17 BP.
 AC ACD58702;
 XX
 DT 24-SEP-2003 (first entry)
 DE HCV DNAzyme substrate sequence #952.
 XX
 KW Nucleic acid molecule; Hepatitis C virus; HCV; Hepatitis B virus; HBV;
 KW RNA stability; RNA expression; RNA synthesis; antisense;
 KW enzymatic nucleic acid; hammerhead ribozyme; DNAzyme; inozyme; zinzyme;
 KW amberyzyme; G-cleaver ribozyme; decoy molecule; aptamer;
 KW HBV reverse transcriptase; Enhancer I region; viral replication;
 KW degenerative; disease state; HBV infection; HCV infection; cirrhosis;
 KW liver failure; hepatocellular carcinoma; hepatotropic; cytostatic;
 KW virucide; antiinflammatory; substrate; ss.
 XX
 OS Hepatitis C virus.
 XX
 FN WO200281494-A1.
 PD 17-OCT-2002.
 XX
 PF 26-MAR-2002; 2002WO-US009187.
 XX
 PR 26-MAR-2001; 2001US-00817879.
 PR 08-JUN-2001; 2001US-00877478.
 PR 08-JUN-2001; 2001US-0256876P.
 PR 24-OCT-2001; 2001US-0335059P.
 PR 05-DEC-2001; 2001US-0337055P.
 XX
 PA (RIBO-) RIBOZYME PHARM INC.
 PA (BLAT/) BLATT L.
 PA (MACE/) MACEJAK D.
 PA (MCSW/) MCSWIGGEN J.
 PA (MORR/) MORRISSEY D.
 PA (PAVC/) PAVCO P.
 PA (LEBP/) LEE P.
 PA (DRAP/) DRAPER K.
 PA (ROBE/) ROBERTS E.
 XX
 PI Blact L, Macejak D, Mcswiggen J, Morrissey D, Pavco P, Lee P;
 PI Draper K, Roberts E;
 XX
 WP1: 2003-229207/22.

PT Novel compound useful for treating cirrhosis, liver failure,
 PT hepatocellular carcinoma, or condition associated with hepatitis C virus
 PT infection.
 XX
 PS Claim 1; Page 251; 387pp; English.
 XX
 CC The present invention relates to nucleic acid molecules which modulate
 CC the synthesis, expression and/or stability of Hepatitis C virus (HCV) or
 CC Hepatitis B virus (HBV) RNA. The nucleic acid molecules include antisense
 CC and enzymatic nucleic acids such as hammerhead ribozymes, DNAzymes,
 CC inozymes, zinzymes, amberyzymes, and G-cleaver ribozymes. Also disclosed
 CC are nucleic acid decoy molecules and aptamers that bind to HBV reverse
 CC transcriptase and/or HBV reverse transcriptase primer sequences, as well
 CC as oligonucleotides that specifically bind the Enhancer I region of HBV
 CC DNA. The nucleic acids may be used to modulate the expression of HBV
 CC genes and HBV viral replication. Also disclosed is a method for screening
 CC compounds and/or potential therapies directed against HBV, and compounds
 CC that modulate the expression and/or replication of HCV. The compounds and
 CC methods of the invention are useful for the treatment of degenerative and
 CC disease states related to HBV and HCV infection, replication and gene
 CC expression such as cirrhosis, liver failure, and hepatocellular
 CC carcinoma. The present sequence represents a substrate for one of the HCV
 CC DNAzyme or minus strand DNAzyme sequences disclosed in the present
 CC invention
 CC
 SQ Sequence 17 BP; 1 A; 5 C; 5 G; 0 T; 6 U; 0 Other;
 Query Match 2.8%; Score 11.8; DB 1; Length 17;
 Best Local Similarity 86.7%; Pred. No. 5e+02; Mismatches 13; Conservative 0; Indels 2; Gaps 0;
 Matches 13; Conservative 0; Indels 2; Gaps 0;
 QY 39 GAAGATGCCACAC 53
 Db 16 GAAGATGCCACAC 2
 RESULT 1098
 ACD61848
 ID ACD61848 standard; RNA; 17 BP.
 AC ACD61848;
 XX
 DT 23-SEP-2003 (first entry)
 DE HCV minus strand DNAzyme substrate sequence #271.
 XX
 KW Nucleic acid molecule; Hepatitis C virus; HCV; Hepatitis B virus; HBV;
 KW RNA stability; RNA expression; RNA synthesis; antisense;
 KW enzymatic nucleic acid; hammerhead ribozyme; DNAzyme; inozyme; zinzyme;
 KW amberyzyme; G-cleaver ribozyme; decoy molecule; aptamer;
 KW HBV reverse transcriptase; Enhancer I region; viral replication;
 KW degenerative; disease state; HBV infection; HCV infection; cirrhosis;
 KW liver failure; hepatocellular carcinoma; hepatotropic; cytostatic;
 KW virucide; antiinflammatory; substrate; ss.
 XX
 OS Hepatitis C virus.
 XX
 FN WO200281494-A1.
 PD 17-OCT-2002.
 XX
 PF 26-MAR-2002; 2002WO-US009187.
 XX
 PR 26-MAR-2001; 2001US-00817879.
 PR 08-JUN-2001; 2001US-00877478.
 PR 08-JUN-2001; 2001US-0256876P.
 PR 24-OCT-2001; 2001US-0335059P.
 PR 05-DEC-2001; 2001US-0337055P.
 XX
 PA (RIBO-) RIBOZYME PHARM INC.
 PA (BLAT/) BLATT L.
 PA (MACE/) MACEJAK D.
 PA (MCSW/) MCSWIGGEN J.

PA (MORRISSEY D.
PA (PAVCO F.
PA (LEE P.
PA (DRAPER K.
PA (ROBERTS E.
XX
XX Blatt L, Macejak D, Mcswigen J, Morrissey D, Pavco F, Lee P,
PI Draper K, Roberts E;
DR WFI; 2003-229207/22.
XX
PT Novel compound useful for treating cirrhosis, liver failure
PT hepatocellular carcinoma, or condition associated with hepatitis C virus
PT infection.
XX
XX Claim 1; Page 279; 387pp; English.

CC The present invention relates to nucleic acid molecules which modulate
CC the synthesis, expression and/or stability of Hepatitis C virus (HCV) or
CC Hepatitis B virus (HBV) RNA. The nucleic acid molecules include antisense
CC and enzymatic nucleic acids such as hammerhead ribozymes, DNazymes,
CC liozymes, zinczymes, amberyzymes, and G-cleaver ribozymes. Also disclosed
CC are nucleic acid decoy molecules and aptamers that bind to HBV reverse
CC transcriptase and/or HBV reverse transcriptase primer sequences, as well
CC as oligonucleotides that specifically bind the Enhancer I region of HBV
CC DNA. The nucleic acids may be used to modulate the expression of HBV
CC genes and HBV viral replication. Also disclosed is a method for screening
CC compounds and/or potential therapies directed against HBV, and compounds
CC that modulate the expression and/or replication of HCV. The compounds and
CC methods of the invention are useful for the treatment of degenerative and
CC disease states related to HBV and HCV infection, replication and gene
CC expression such as cirrhosis, liver failure, and hepatocellular
CC carcinoma. The present sequence represents a substrate for one of the HCV
CC DNazyme or minus strand DNazyme sequences disclosed in the present
CC invention

SO Sequence 17 BP; 4 A; 4 C; 6 G; 0 T; 3 U; 0 Other;

CY Query Match 2.8%; Score 11.8; DB 1; Length 17;
Best Local Similarity 80.0%; Pred. No. Seq+02;
Matches 12; Conservative 1; Mismatches 2; Indels 0; Gaps 0;

DY 11 GAACCTGGCGGTGAC 25
||| ||| ||| ||| ||| |||
Db 3 GAACACGCCGGUGUC 17

RESULT 1099
ACD64937/C
ID ACD64937 standard; RNA; 17 BP.
XX
XX ACD64937;
XX
XX 30-SEP-2003 (first entry)
XX
XX
XX HCV minus strand DNazyme substrate sequence #1792.
XX
XX Nucleic acid molecule; Hepatitis C virus; HCV; Hepatitis B virus; HBV;
XX RNA stability; RNA expression; RNA synthesis; antisense;
XX enzymatic nucleic acid; hammerhead ribozyme; DNazyme; liozyme; zinczyme;
XX amberyzyme; G-cleaver ribozyme; decoy molecule; aptamer;
XX HBV reverse transcriptase; Enhancer I region; viral replication;
XX degenerative; disease state; HBV infection; HCV infection; cirrhosis;
XX liver failure; hepatocellular carcinoma; hepatotropic; cytostatic;
XX virucide; antiinflammatory; substrate; ss.
XX
XX
XX Hepatitis C virus.
XX
XX WO200281494-AI.
XX
XX 17-OCT-2002.
XX
XX 26-MAR-2002; 2002WO-US0009187.
XX

XX 26-MAR-2001; 2001US-00817879.
PR 06-JUN-2001; 2001US-00877478.
PR 08-JUN-2001; 2001US-0296876P.
PR 24-OCT-2001; 2001US-0335059P.
XX 05-DEC-2001; 2001US-0337055P.

XX (RIBO-) RIBOZYME PHARM INC.
PA (BLAT/) BLATT L.
PA (MACE/) MACEJAK D.
PA (MOSW/) MORRISSEY D.
PA (MORR/) MORRISSEY D.
PA (PAVC/) PAVCO P.
PA (LEE/) LEE P.
PA (DRAV/) DRAPER K.
XX (ROBE/) ROBERTS E.

PI Blatt L, Macejak D, Mcswiggen J, Morrissey D, Pavco P, Lee P;
PI Draper K, Roberts E;
XX WPI; 2003-229207/22.

PT Novel compound useful for treating cirrhosis, liver failure,
PT hepatocellular carcinoma, or condition associated with hepatitis C virus
PT infection.

PS Claim 1; Page 307; 387pp; English.

XX The present invention relates to nucleic acid molecules which modulate
XX the synthesis, expression and/or stability of Hepatitis C virus (HCV) or
CC Hepatitis B virus (HBV) RNA. The nucleic acid molecules include antisense
CC and enzymatic nucleic acids such as hammerhead ribozymes, DNAzymes,
CC inozymes, zincfymes, amberyfymes, and G-cleaver ribozymes. Also disclosed
CC are nucleic acid decoy molecules and aptamers that bind to HBV reverse
CC transcriptase and/or HBV reverse transcriptase primer sequences, as well
CC as oligonucleotides that specifically bind the Enhancer I region of HBV
CC DNA. The nucleic acids may be used to modulate the expression of HBV
CC genes and HBV viral replication. Also disclosed is a method for screening
CC compounds and/or potential therapies directed against HBV, and compounds
CC that modulate the expression and/or replication of HCV. The compounds and
CC methods of the invention are useful for the treatment of degenerative and
CC disease states related to HBV and HCV infection, replication and gene
CC expression such as cirrhosis, liver failure, and hepatocellular
CC carcinoma. The present sequence represents a substrate for one of the HCV
CC DNAzyme or minus strand DNAzyme sequences disclosed in the present
CC invention

XX Sequence 17 BP; 0 A; 7 C; 8 G; 0 T; 2 U; 0 Other;

SQ Query Match 2.8%; Score 11.8; DB 1; Length 17;
Best Local Similarity 86.7%; Pred. No. 5e+02;
Matches 13; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

GZ 108 CGGACCGCGAGCAG 122
||| ||| ||| |||
DB 17 CGCGCGCGCGCGAG 3

RESULT 1100
ACC65050
ID ACC65050 standard; DNA; 17 BP.
XX
XX ACC65050;
DE 01-JUL-2003 (first entry)
DT Murine oligonucleotide associated with tumour suppression, SEQ ID 2297.
XX
XX Cycloastic; vincicide; neuroprotective; nootropic; neuroleptic; murine;
KW tumour suppression; tumour reversion; apoptosis; virus resistance;
KW viral disease; tumour; cell degeneration; cancer; Alzheimer's disease;
KW schizophrenia; ss.
XX

OS Mus musculus.
 XX
 PN WO2003025176-A2.
 XX
 PD 27-MAR-2003.
 XX
 PF 17-SEP-2002; 2002WO-IB004210.
 XX
 PR 17-SEP-2001; 2001FR-00011979.
 XX
 PA (MOLE-) MOLECULAR ENGINES LAB.
 XX
 PI Telerman A, Amson R, Tuijinder M,
 DR WPI; 2003-333167/31.
 XX
 PT New isolated nucleic acid, useful for treating viral diseases associated
 PT with tumors and cell degeneration, also related polypeptides, antibodies
 PT and transfected cells.
 XX
 PS Disclosure; Page 299; 738pp; French.
 XX
 CC The present invention relates to murine oligonucleotides (ACC62754-
 CC ACC68806), which are associated with tumour suppression, tumour
 CC reversion, apoptosis and virus resistance. The oligonucleotides are
 CC useful as (1) as probes and primers for detecting, identifying,
 CC quantifying and/or amplifying nucleic acid, e.g. as one component of a
 CC gene chip, in vitro as (anti)sense reagents; and (2) for production of
 CC recombinant polypeptides. The oligonucleotides are useful for preparation
 CC of pharmaceuticals for prevention and/or treatment of viral diseases that
 CC are characterised by development of tumours or cell degeneration,
 CC specifically cancer but also Alzheimer's disease and schizophrenia
 XX
 SQ Sequence 17 BP; 2 A; 5 C; 6 G; 4 T; 0 U; 0 Other;
 QY
 Query Match 2.8%; Score 11.8; DB 1; Length 17;
 Best Local Similarity 86.7%; Pred. No. 5e+02;
 Matches 13; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
 DB 192 ATCCACTGCTCGGTG 206
 2 ATCTTCACTTCGCTG 16
 RESULT 1101
 ACC84062
 ID ACC84062 standard; DNA; 17 BP.
 XX
 AC ACC84062;
 XX
 DT 22-SEP-2003 (first entry)
 XX
 DE Human cytochrome P450 gene CYP2D6 reverse PCR primer A6.
 XX
 XX Differential amplification of polymorphisms; DAP; human; CYP2D6;
 KM cytochrome P450; polymorphism; haplotype; PCR; primer; ss.
 OS Homo sapiens.
 XX
 OS WO2003046206-A2.
 PN
 PD 05-JUN-2003.
 XX
 PF 27-NOV-2002; 2002WO-US038278.
 XX
 PR 28-NOV-2001; 2001US-0334046P.
 XX
 PA (MJB-I-) MJ BIOWORKS INC.
 XX
 PI Wang Y, Xi L, Finney M, Chen F;
 DR WPI; 2003-482525/45.
 XX

PT Determining allelic DNA sequences and haplotypes in a DNA sample,
 PT comprises using primers with a single difference corresponding to a
 PT polymorphic site combined with quantitative PCR using a fluorescent
 PT readout.
 XX
 PS Example 1; Page 22; 36pp; English.
 XX
 CC The present sequence is that of primer A6, which is one of a set of
 CC primers (see ACC84057-62) used in an example of the method of the
 CC invention, i.e. differential amplification of polymorphisms (DAP), to
 CC distinguish 4 templates that differed at a single position. A 475 bp
 CC portion of the human P450 gene CYP2D6 was amplified using primer A1
 CC (forward) and A5 (reverse) and cloned into a TA cloning vector. 3 PCR
 CC primers (A2-A4) identical to A1 except for a single difference at their
 CC 3' terminal bases were used with A5 to re-amplify the CYP2D6 fragment,
 CC generating the point mutations A, C and T at nucleotide 3280 (G is
 CC present in the most common allele). The 3 amplicons were cloned into TA
 CC cloning vector. In order to examine the effect of amplicon size, an
 CC additional reverse primer, A6, was used to generate a 57 bp amplicon. DAP
 CC was performed and was able to distinguish between the 4 templates. The
 CC method combines allele-specific PCR with technology used for quantitative
 CC PCR. It can be used to score the presence or absence of particular
 CC polymorphisms or particular haplotypes in a DNA sample
 XX
 SQ Sequence 17 BP; 2 A; 7 C; 3 G; 5 T; 0 U; 0 Other;
 QY
 Query Match 2.8%; Score 11.8; DB 1; Length 17;
 Best Local Similarity 86.7%; Pred. No. 5e+02;
 Matches 13; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
 DB 353 CTACAGGACTTCTT 367
 1 CTCACAGGACTTCTT 15
 RESULT 1102
 ACC83872
 ID ACC83872 standard; DNA; 17 BP.
 XX
 AC ACC83872;
 XX
 DT 08-SEP-2003 (first entry)
 XX
 DE Human cytochrome P450 gene CYP2D6 reverse PCR primer R1.
 XX
 KM Human cytochrome P450; CYP2D6; nucleic acid detection; error correction;
 XX single nucleotide polymorphism; SNP; PCR; primer; ss.
 OS Homo sapiens.
 XX
 OS WO2003046208-A2.
 PN
 PD 05-JUN-2003.
 XX
 PF 27-NOV-2002; 2002WO-US038435.
 XX
 PR 28-NOV-2001; 2001US-0334032P.
 XX
 PA (MJB-I-) MJ BIOWORKS INC.
 XX
 PI Wang Y, Finney M, Chen F;
 DR WPI; 2003-505210/47.
 XX
 PT Identifying polymorphisms using an error correcting assay that utilizes
 PT an improved generation of nucleic acid polymerases and multiplexing the
 PT assay.
 XX
 PS Example 1; Page 21; 35pp; English.
 XX
 CC The present primer is a reverse primer for the PCR amplification of the
 CC human cytochrome P450 CYP2D6 gene. It was used in an example from the
 CC invention in which modified error-correcting polymerases were shown to be

CC superior to unmodified error-correcting polymerases in amplifying genomic
 CC DNA from low copy number templates. The enzymes tested were Pfu DNA
 CC polymerase and Pfu, a fusion of Sso7d to the C-terminus of Pfu. Pfu was
 CC found to require 1/4 to 1/10 as many units as Pfu for efficient
 CC amplification. The invention provides a method of detecting
 CC polymorphisms, e.g. single nucleotide polymorphisms, by amplification and
 CC error correction using polymerases improved by the addition of a sequence
 CC non-specific nucleic acid-binding domain that enhances the ability of
 CC the enzyme to bind and catalytically modify the nucleic acid
 XX

SO Sequence 17 BP; 2 A; 7 C; 3 G; 5 T; 0 U; 0 Other;

Query Match 2.8%; Score 11.8; DB 1; Length 17;
 Best Local Similarity 86.7%; Pred. No. 5e+02;
 Matches 13; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 353 CTACAGGACTCTCT 367
 Db 1 CTCACGCGACTCTT 15

RESULT 1103
 ADB40520
 ID ADB40520 standard; DNA; 17 BP.
 AC ADB40520;
 XX 18-DEC-2003 (revised)
 DT 04-DEC-2003 (first entry)
 XX

DE Tumour suppression/reversion associated nucleotide #43.
 XX
 XX cytostatic; antiviral; neuroprotective; nootropic; neuroleptic; ss;
 KM primer; probe; tumour suppression; tumour reversion; apoptosis;
 KM virus resistance; transgenic animals; Alzheimer's disease; schizophrenia;
 KM diagnosis.
 XX
 XX Homo sapiens.
 OS
 XX WO2003040369-A2.
 PN
 XX 15-MAY-2003.
 PD
 XX 17-SEP-2002; 2002MO-IB004219.
 PF
 XX 17-SEP-2001; 2001FR-00011981.
 PR
 XX (MOLE-) MOLECULAR ENGINES LAB.
 PA
 XX Telerman A, Amson R, Tuijnder M;
 PI WPI, 2003-441574/41.
 DR

XX New nucleic acid encoding human prostate membrane-specific antigen,
 PT useful e.g. for treatment of tumors and viral infection, also related
 PT polypeptide and antibodies.
 XX
 XX Disclosure; Page 130; 771pp; French.
 PS

CC The invention relates to the isolation of 6327 nucleotide sequences,
 CC fragments of at least 15 consecutive nucleotides of these nucleotides, a
 CC sequence having at least 80% identity, after optimal alignment, with the
 CC nucleotides, a sequence that hybridizes under stringent conditions with
 CC the nucleotides, or the complement, or corresponding RNA, of the
 CC nucleotides. The nucleotides are used as probes or primers for detecting,
 CC identifying, quantifying and/or amplifying nucleic acids, as in vitro
 CC sense and antisense sequences, of nucleotides involved in tumour
 CC suppression or reversion, apoptosis and or viral resistance, to produce
 CC recombinant polypeptides, and to prepare transgenic animals, as
 CC experimental models. The nucleotides (also vectors containing them and
 CC cells containing the vectors), the encoded polypeptides and antibodies
 CC (Ab) against the polypeptides are useful for prevention and/or treatment
 CC of viral infections or diseases characterized by development of tumours

CC or cell degeneration (e.g. Alzheimer's disease or schizophrenia).
 CC Analysis of the expression of the nucleotides can be used for diagnosis
 CC and/or prognosis of these diseases. The nucleotides and polypeptides can
 CC also be used to screen for their specific interactive molecules,
 CC potentially useful for treating diseases associated with abnormal
 CC expression of the nucleotides.
 XX

SO Sequence 17 BP; 3 A; 4 C; 7 G; 3 T; 0 U; 0 Other;

Query Match 2.8%; Score 11.8; DB 1; Length 17;
 Best Local Similarity 86.7%; Pred. No. 5e+02;
 Matches 13; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 300 GACCTGAGCCCGCG 314
 Db 1 GACTGAGCCCTCGG 15

RESULT 1104
 ADC04254/C
 ID ADC04254 standard; DNA; 17 BP.
 XX
 AC ADC04254;
 XX
 DT 18-DEC-2003 (first entry)
 XX

DE Human Na/H exchanger-like protein 1 gene oligonucleotide #701.
 XX
 XX ss; gene therapy; vaccine; sodium/hydrogen exchanger like protein;
 KM NHEPL1; passive replacement therapy; vaccine; diagnosis.
 KM
 XX Homo sapiens.
 OS
 XX BP1273660-A2.
 PN
 XX 08-JAN-2003.
 PD
 XX 25-JAN-2002; 2002EP-00001160.
 PF
 XX 30-JAN-2001; 2001WO-US000666.
 PR
 XX 23-MAY-2001; 2001US-00864761.
 PR
 XX 21-DEC-2001; 2001US-034331P.
 XX

PA (ABOM-) ABOVICA INC.
 XX
 XX Gu Y;
 PI
 XX WPI, 2003-302724/30.
 DR

XX New human sodium-hydrogen exchanger like protein 1 (NHEPL1), useful as a
 PT passive replacement therapy or as a vaccine for treating or preventing
 PT disorders associated with aberrant expression or activity of human
 PT NHEPL1.
 XX
 XX Example 2; SEQ ID NO 741; 468pp; English.
 PS

CC The invention relates to a nucleic acid molecule which encodes a Na⁺/H⁺
 CC exchanger like protein (NHEPL1). The NHEPL1 nucleic acid molecule, NHEPL1
 CC polypeptide, an antibody against the protein or its antigen-binding
 CC fragment is useful in therapy. The NHEPL1 nucleic acid molecule, NHEPL1
 CC polypeptide and an agonist are particularly useful for manufacturing a
 CC medicament for treating or preventing a disorder associated with
 CC decreased expression or activity of human NHEPL1. The antibody or its
 CC antigen-binding fragment, and an antagonist, are useful for manufacturing
 CC a medicament for treating or preventing a disorder associated with
 CC increased expression or activity of human NHEPL1. The NHEPL1 nucleic acid
 CC or protein is useful as passive replacement therapy, as a vaccine, or in
 CC diagnostic methods. This sequence corresponds to a 17-mer oligonucleotide
 CC spanning the sequence of the human NHEPL1 gene (ADC03514).
 XX

SO Sequence 17 BP; 3 A; 4 C; 4 G; 6 T; 0 U; 0 Other;

Query Match 2.8%; Score 11.8; DB 1; Length 17;

Best Local Similarity 86.7%; Pred. No. 5e+02;
Matches 13; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 40 AAGATGGCCACCACT 54
DB 17 AAGATGGCCACCACT 3

RESULT 1105
ADC04257/c
ID ADC04257 standard; DNA; 17 BP.

AC ADC04257;
XX 18-DEC-2003 (first entry)
XX Human Na/H exchanger-like protein 1 gene oligonucleotide #704.

XX ss; gene therapy; vaccine; sodium/hydrogen exchanger like protein;
KM NHEPL1; passive replacement therapy; vaccine; diagnosis.

XX Homo sapiens.

XX EP1273660-A2.

XX 08-JAN-2003.

XX 25-JAN-2002; 2002EP-00001160.

XX 30-JAN-2001; 2001WO-US000666.

XX 23-MAY-2001; 2001US-00864761.

XX 21-DEC-2001; 2001US-0343331P.

XX (ABOM-) AEOMTCA INC.

XX Gu Y;

XX WPI; 2003-302724/30.

XX New human sodium-hydrogen exchanger like protein 1 (NHEPL1), useful as a
XX passive replacement therapy or as a vaccine for treating or preventing
XX disorders associated with aberrant expression or activity of human
XX NHEPL1.

XX Example 2; SEQ ID NO 744; 468pp; English.

XX The invention relates to a nucleic acid molecule which encodes a Na⁺/H⁺
XX exchanger like protein (NHEPL1). The NHEPL1 nucleic acid molecule, NHEPL1
XX polypeptide, an antibody against the protein or its antigen-binding
XX fragment is useful in therapy. The NHEPL1 nucleic acid molecule, NHEPL1
XX polypeptide and an agonist are particularly useful for manufacturing a
XX medicament for treating or preventing a disorder associated with
XX decreased expression or activity of human NHEPL1. The antibody or its
XX antigen-binding fragment, and an antagonist, are useful for manufacturing
XX a medicament for treating or preventing a disorder associated with
XX increased expression or activity of human NHEPL1. The NHEPL1 nucleic acid
XX or protein is useful as passive replacement therapy, as a vaccine, or in
XX diagnostic methods. This sequence corresponds to a 17-mer oligonucleotide
XX spanning the sequence of the human NHEPL1 gene (ADC03514).

XX Sequence 17 BP; 2 A; 5 C; 4 G; 6 T; 0 U; 0 Other;

Query Match 2.8%; Score 11.8; DB 1; Length 17;
Best Local Similarity 86.7%; Pred. No. 5e+02;
Matches 13; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 39 GAAGATGGCCACCAAC 53
DB 15 GAAGATGGCCACCAAC 1

RESULT 1106
ADC98354

ID ADC98354 standard; DNA; 17 BP.

XX ADC98354;

XX 01-JAN-2004 (first entry)

XX ACP10 polymorphism marker PCR primer B primer seq.

XX low bone mineral density; BMD; bone damage; polymorphism; osteoporosis;
XX single nucleotide polymorphism; SNP; PCR primer; ss; human.

XX Synthetic.

XX Homo sapiens.

XX WO2003054218-A2.

XX 03-JUL-2003.

XX 19-DEC-2002; 2002WO-US040948.

XX 20-DEC-2001; 2001US-0342711P.

XX 04-NOV-2002; 2002US-0423559P.

XX (INCY-) INCYTE GENOMICS INC.

XX Jones KA, Valdes A, Townley DJ, Mangion J, Galwey N, Bennett S;
XX McKay I, Schafer A;

XX WPI; 2003-559156/52.

XX Determining whether an individual is predisposed to susceptibility to low
XX bone mineral density (BMD) and/or bone damage, involves identifying
XX polymorphisms in associated genes.

XX Example 8; Page 237; 246pp; English.

XX The present invention describes a method of determining whether an
XX individual is predisposed to susceptibility to low bone mineral density
XX (BMD) and/or bone damage comprising identifying whether the individual
XX has at least one polymorphism in a polynucleotide encoding a protein,
XX where the polynucleotide is one of 81,200-500 nucleotide sequences (S1,
XX see ADC98235 to ADC98315). An agent identified in an method from the
XX present invention which can be used for the prevention or treatment of a
XX disease resulting in susceptibility to low BMD and/or bone damage is
XX useful in the manufacture of a medicament for use in modulating the
XX susceptibility to low BMD and/or bone damage. The disease associated with
XX low BMD and/or bone damage is osteoporosis. The present PCR primer
XX sequence is used in the exemplification of the present invention.

XX Sequence 17 BP; 3 A; 5 C; 5 G; 4 T; 0 U; 0 Other;

Query Match 2.8%; Score 11.8; DB 1; Length 17;
Best Local Similarity 86.7%; Pred. No. 5e+02;
Matches 13; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 54 TCACAGAGAGGCTCTG 68
DB 3 TCACAGAGAGGCTCTG 17

RESULT 1107

ADD19944

XX ADD19944 standard; DNA; 17 BP.

XX ADD19944;

XX 15-JAN-2004 (first entry)

XX Oreochromis niloticus microsatellite primer SEQ ID NO:579.

XX single nucleotide polymorphism; SNP; fish; Salmo salar;
XX Oreochromis niloticus; Atlantic halibut; microsatellite; cod;
XX polymorphic site; seabass; salmonidae; tilapia; rainbow trout; halibut;

KM detection; primer; ss.
 XX Synthetic.
 OS Oreochromis niloticus.
 XX WO2003060160-A2.
 PN 24-JUL-2003.
 PD 17-JAN-2003; 2003WO-IB000112.
 PF 18-JAN-2002; 2002US-0349950P.
 PR 16-AUG-2002; 2002US-0404200P.
 XX (GENO-) GENOMAR ASA.
 PA Lie O, Slettan A, Hoyum M, Lingaas F;
 PI WPI; 2003-627388/59.
 DR WPI; 2003-627388/59.
 XX Novel isolated nucleic acid molecule comprising single nucleotide
 PT polymorphism associated with fish, useful for forming PCR primers which
 PT are useful for detecting single nucleotide polymorphisms in fish nucleic
 PT acids.
 PS Claim 18; SEQ ID NO 579; 233bp; English.
 XX The present invention describes an isolated nucleic acid (I) comprising a
 CC single nucleotide polymorphism (SNP) chosen from: (1) a nucleic acid of
 CC Salmo salar SNPs, Oreochromis niloticus SNPs or Atlantic halibut SNPs;
 CC and (1i) a nucleic acid having nucleotide sequence that hybridizes to
 CC (1), or its complement under highly stringent hybridisation conditions.
 CC Also described: (1i) an isolated oligonucleotide (1i) comprising at least
 CC 17 contiguous nucleotides of a nucleotide sequence of S. salar SNPs, O.
 CC niloticus SNPs, O. niloticus microsatellites, Atlantic halibut SNPs, cod
 CC polymorphic sites and seabass polymorphic sites, or their complement; (2)
 CC a primer pair (1ii) suitable for use in PCR, comprising two (1i) capable
 CC of amplifying a nucleotide sequence chosen from S. salar SNPs and, O.
 CC niloticus SNPs, O. niloticus microsatellites, Atlantic halibut SNPs, cod
 CC polymorphic sites and seabass polymorphic sites, and determining (M) the
 CC origin of fish sample comprising providing a parentage genotype database
 CC comprising a collection of candidate parent genotypes, where each of the
 CC candidate parent genotype represents a distinct origin, and comparing a
 CC sample genotype to the parentage genotype database, where a match between
 CC the sample genotype and one of the candidate parent genotype identifies
 CC the origin of the sample. (M) is useful for determining the origin of
 CC a fish sample such as family salmonidae, S. salar, Tilapia, O. niloticus,
 CC rainbow trout, halibut, seabass and Atlantic cod. (1i) is useful for
 CC detecting nucleic acid molecule comprising SNP in a sample, which
 CC involves contacting the sample containing nucleic acids with one or more
 CC (1i) derived from nucleotide sequence of S. salar SNPs and O. niloticus
 CC SNPs, and identifying nucleic acid that hybridizes to (1i). (1i) is
 CC useful for detecting nucleic acid molecule comprising a polymorphic
 CC sequence in a sample, comprising contacting the sample containing nucleic
 CC acids with one or more (1i) which is derived from O. niloticus
 CC microsatellite, O. niloticus SNPs, Atlantic halibut SNPs, cod polymorphic
 CC sites or seabass polymorphic sites, and identifying a nucleic acid that
 CC hybridizes to (1i). (1ii) is useful for detecting nucleic acid molecule
 CC comprising a microsatellite sequence in sample. The present sequence is
 CC used in the exemplification of the present invention.
 XX
 SQ Sequence 17 BP; 6 A; 3 C; 7 G; 1 T; 0 U; 0 Other;
 Query Match 2.8%; Score 11.8; DB 1; Length 17;
 Best Local Similarity 86.7%; Pred. No. 5e+02;
 Matches 13; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
 QY 82 GCGAGTGGACATCA 96
 Db 2 GGGCAGGAGACATCA 16

RESULT 1108

ADD20889
 ID ADD20889 standard; DNA; 17 BP.
 XX
 AC ADD20889;
 XX
 DT 15-JAN-2004 (first entry)
 XX
 DE Human GAP_N DNA 17-mer oligo #121.
 XX
 KW Gene therapy; antibody therapy; modulator of GAPN;
 KM GTP-activator for Rab-like GTPase; GAP_N; immunogen; ss.
 XX
 OS Homo sapiens.
 XX WO2003033703-A2.
 PN 24-APR-2003.
 PD 11-OCT-2002; 2002WO-US032597.
 PF 15-OCT-2001; 2001US-0330323P.
 PR (AMSH) AMERSHAM BIOSCIENCES SV CORP.
 PA Zhang J;
 PI WPI; 2003-403224/38.
 DR WPI; 2003-403224/38.
 XX Novel human GTP-activator protein for Rab-like GTPase and polynucleotide
 PT encoding the protein, useful for diagnosing, treating or preventing
 PT disorders associated with increased expression or activity of the
 PT protein.
 PS Example 2; SEQ ID NO 145; 149bp; English.
 XX The invention relates to an isolated human GTP-activator protein for Rab-
 CC like GTPase (GAPN) polypeptide (1), a sequence having 65% identity to
 CC (1), a sequence in which at least 95% of deviations from (1) are
 CC conservative substitutions, or a fragment of at least 8 contiguous amino
 CC acids of (1). The polypeptide is useful for identifying a specific
 CC binding partner for itself, by contacting the polypeptide in vivo to a
 CC potential binding partner and determining if the polypeptide binding
 CC partner binds to the polypeptide. (1) and a nucleic acid encoding the
 CC polypeptide (1i) are useful for diagnosing or monitoring a disease caused
 CC by altered expression of GAPN, by determining the level of expression of
 CC GAPN in a sample of nucleic acids or proteins that derives from a subject
 CC suspected to have the disease, alterations from a normal level of
 CC expression providing diagnostic and/or monitoring information. (1), (1i)
 CC or agonist of (1) is useful for treating or preventing a disorder
 CC associated with decreased expression or activity of GAPN, and an
 CC antagonist of (1) is useful for treating or preventing a disorder
 CC associated with increased expression or activity of GAPN (all claimed).
 CC (1) is useful as immunogen to raise antibodies that specifically
 CC recognize GAPN proteins. (1i) is useful to drive in vivo expression of
 CC GAPN proteins, and as hybridization probes to detect, characterize and
 CC quantify GAPN nucleic acids in and isolate GAPN nucleic acids from both
 CC genomic and transcript-derived nucleic acid samples. This sequence
 CC represents a 17-mer oligonucleotide spanning the GAP_N DNA sequence.
 XX
 SQ Sequence 17 BP; 3 A; 8 C; 5 G; 1 T; 0 U; 0 Other;
 Query Match 2.8%; Score 11.8; DB 1; Length 17;
 Best Local Similarity 86.7%; Pred. No. 5e+02;
 Matches 13; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
 QY 383 CGACGACGCGCCCA 397
 Db 1 CGACGACGCGCCCTA 15

RESULT 1109
ADD21032/c
ID ADD21032 standard; DNA; 17 BP.

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XX AC ADD21032;
XX XX 15-JAN-2004 (first entry)
XX DT
XX DE Human GAP_N DNA 17-mer oligo #264.
XX KM gene therapy; antibody therapy; modulator of GAPN;
XX KW GTP-activator for Rab-like GTPase; GAP_N; immunogen; ss.
XX OS Homo sapiens.
XX PN MO2003033703-A2.
XX PD 24-APR-2003.
XX PF 11-OCT-2002; 2002MO-US032597.
XX PR 15-OCT-2001; 2001US-0330323P.
XX PA (AMSH ) AMERSHAM BIOSCIENCES SV CORP.
XX PI Zhang J;
XX DR WPI; 2003-403224/38.
XX PT Novel human GTP-activator protein for Rab-like GTPase and polynucleotide
XX PT encoding the protein, useful for diagnosing; treating or preventing
XX PT disorders associated with increased expression or activity of the
XX PT protein.
XX PS Example 2; SEQ ID NO 288; 149pp; English.
XX CC The invention relates to an isolated human GTP-activator protein for Rab-
XX CC like GTPase (GAPN) polypeptide (I), a sequence having 65% identity to
XX CC (I), a sequence in which at least 95% of deviations from (I) are
XX CC conservative substitutions, or a fragment of at least 8 contiguous amino
XX CC acids of (I). The polypeptide is useful for identifying a specific
XX CC binding partner for itself, by contacting the polypeptide in vivo to a
XX CC potential binding partner and determining if the polypeptide binding
XX CC partner binds to the polypeptide. (I) and a nucleic acid encoding the
XX CC polypeptide (II) are useful for diagnosing or monitoring a disease caused
XX CC by altered expression of GAPN, by determining the level of expression of
XX CC GAPN in a sample of nucleic acids or proteins that derives from a subject
XX CC suspected to have the disease, alterations from a normal level of
XX CC expression providing diagnostic and/or monitoring information. (I), (II)
XX CC or agonist of (I) is useful for treating or preventing a disorder
XX CC associated with decreased expression or activity of GAPN, and an
XX CC antagonist of (I) is useful for treating or preventing a disorder
XX CC associated with increased expression or activity of GAPN (all claimed).
XX CC (I) is useful as immunogen to raise antibodies that specifically
XX CC recognize GAPN proteins. (II) is useful to drive in vivo expression of
XX CC GAPN proteins, and as hybridization probes to detect, characterize and
XX CC quantify GAPN nucleic acids in and isolate GAPN nucleic acids from both
XX CC genomic and transcript-derived nucleic acid samples. This sequence
XX CC represents a 17-mer oligonucleotide spanning the GAP_N DNA sequence.
XX SQ Sequence 17 BP; 2 A; 7 C; 6 G; 2 T; 0 U; 0 Other;

Query Match 2.8%; Score 11.8; DB 1; Length 17;
Best Local Similarity 86.7%; Pred. No. 5e+02;
Matches 13; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 256 CGGCGACGGTGCACC 270
DB 16 CGGCGACGGTGCCTC 2

RESULT 1110
ADD20887
XX ID ADD20887 standard; DNA; 17 BP.
XX AC ADD20887;

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XX DT 15-JAN-2004 (first entry)
XX XX Human GAP_N DNA 17-mer oligo #119.
XX DE
XX KM gene therapy; antibody therapy; modulator of GAPN;
XX KW GTP-activator for Rab-like GTPase; GAP_N; immunogen; ss.
XX OS Homo sapiens.
XX PN MO2003033703-A2.
XX PD 24-APR-2003.
XX PF 11-OCT-2002; 2002MO-US032597.
XX PR 15-OCT-2001; 2001US-0330323P.
XX PA (AMSH ) AMERSHAM BIOSCIENCES SV CORP.
XX PI Zhang J;
XX DR WPI; 2003-403224/38.
XX PT Novel human GTP-activator protein for Rab-like GTPase and polynucleotide
XX PT encoding the protein, useful for diagnosing; treating or preventing
XX PT disorders associated with increased expression or activity of the
XX PT protein.
XX PS Example 2; SEQ ID NO 143; 149pp; English.
XX CC The invention relates to an isolated human GTP-activator protein for Rab-
XX CC like GTPase (GAPN) polypeptide (I), a sequence having 65% identity to
XX CC (I), a sequence in which at least 95% of deviations from (I) are
XX CC conservative substitutions, or a fragment of at least 8 contiguous amino
XX CC acids of (I). The polypeptide is useful for identifying a specific
XX CC binding partner for itself, by contacting the polypeptide in vivo to a
XX CC potential binding partner and determining if the polypeptide binding
XX CC partner binds to the polypeptide. (I) and a nucleic acid encoding the
XX CC polypeptide (II) are useful for diagnosing or monitoring a disease caused
XX CC by altered expression of GAPN, by determining the level of expression of
XX CC GAPN in a sample of nucleic acids or proteins that derives from a subject
XX CC suspected to have the disease, alterations from a normal level of
XX CC expression providing diagnostic and/or monitoring information. (I), (II)
XX CC or agonist of (I) is useful for treating or preventing a disorder
XX CC associated with decreased expression or activity of GAPN, and an
XX CC antagonist of (I) is useful for treating or preventing a disorder
XX CC associated with increased expression or activity of GAPN (all claimed).
XX CC (I) is useful as immunogen to raise antibodies that specifically
XX CC recognize GAPN proteins. (II) is useful to drive in vivo expression of
XX CC GAPN proteins, and as hybridization probes to detect, characterize and
XX CC quantify GAPN nucleic acids in and isolate GAPN nucleic acids from both
XX CC genomic and transcript-derived nucleic acid samples. This sequence
XX CC represents a 17-mer oligonucleotide spanning the GAP_N DNA sequence.
XX SQ Sequence 17 BP; 3 A; 7 C; 4 G; 3 T; 0 U; 0 Other;

Query Match 2.8%; Score 11.8; DB 1; Length 17;
Best Local Similarity 86.7%; Pred. No. 5e+02;
Matches 13; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 383 CGACGACGGCGCAA 397
DB 3 CGACGACGGCGCCTA 17

RESULT 1111
ADD20930/c
XX ID ADD20930 standard; DNA; 17 BP.
XX AC ADD20930;
XX DT 15-JAN-2004 (first entry)

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XX Human GAP_N DNA 17-mer oligo #162.
DE
XX
XX gene therapy; antibody therapy; modulator of GAPN;
KM GTP-activator for Rab-like GTPase; GAP_N; immunogen; ss.
XX
XX Homo sapiens.
OS
XX
XX MO2003033703-A2.
PN
XX
XX 24-APR-2003.
PD
XX
XX 11-OCT-2002; 2002MO-US032597.
PF
XX
XX 15-OCT-2001; 2001US-0330323P.
PR
XX
XX (AMSH ) AMERSHAM BIOSCIENCES SV CORP.
PA
XX
XX Zhang J;
PI
XX
XX WPI; 2003-403224/38.
DR
XX
XX Novel human GTP-activator protein for Rab-like GTPase and polynucleotide
PT encoding the protein, useful for diagnosing, treating or preventing
PT disorders associated with increased expression or activity of the
PT protein.
XX
XX
XX Example 2; SEQ ID NO 186; 149pp; English.
PS
XX
XX The invention relates to an isolated human GTP-activator protein for Rab-
CC like GTPase (GAPN) polypeptide (I), a sequence having 65% identity to
CC (I), a sequence in which at least 95% of deviations from (I) are
CC conservative substitutions, or a fragment of at least 8 contiguous amino
CC acids of (I). The polypeptide is useful for identifying a specific
CC binding partner for itself, by contacting the polypeptide in vivo to a
CC potential binding partner and determining if the polypeptide binding
CC partner binds to the polypeptide. (I) and a nucleic acid encoding the
CC polypeptide (II) are useful for diagnosing or monitoring a disease caused
CC by altered expression of GAPN, by determining the level of expression of
CC GAPN in a sample of nucleic acids or proteins that derives from a subject
CC suspected to have the disease, alterations from a normal level of
CC expression providing diagnostic and/or monitoring information. (I), (II)
CC or agonist of (I) is useful for treating or preventing a disorder
CC associated with decreased expression or activity of GAPN, and an
CC antagonist of (I) is useful for treating or preventing a disorder
CC associated with increased expression or activity of GAPN (all claimed).
CC (I) is useful as immunogen to raise antibodies that specifically
CC recognize GAPN proteins. (II) is useful to drive in vivo expression of
CC GAPN proteins, and as hybridization probes to detect, characterize and
CC quantify GAPN nucleic acids in and isolate GAPN nucleic acids from both
CC genomic and transcript-derived nucleic acid samples. This sequence
CC represents a 17-mer oligonucleotide spanning the GAP_N DNA sequence.
XX
XX
XX Sequence 17 BP; 3 A; 8 C; 4 G; 2 T; 0 U; 0 Other;
SQ
XX
XX Query Match 2.8%; Score 11.8; DB 1; Length 17;
XX Best Local Similarity 86.7%; Pred. NO. 5e+02;
XX Matches 13; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY 15 CTGCGGGTGACCGAG 29
DB 16 CTGCGGGTGACCGTG 2

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XX
XX gene therapy; antibody therapy; modulator of GAPN;
KM GTP-activator for Rab-like GTPase; GAP_N; immunogen; ss.
XX
XX Homo sapiens.
OS
XX
XX MO2003033703-A2.
PN
XX
XX 24-APR-2003.
PD
XX
XX 11-OCT-2002; 2002MO-US032597.
PF
XX
XX 15-OCT-2001; 2001US-0330323P.
PR
XX
XX (AMSH ) AMERSHAM BIOSCIENCES SV CORP.
PA
XX
XX Zhang J;
PI
XX
XX WPI; 2003-403224/38.
DR
XX
XX Novel human GTP-activator protein for Rab-like GTPase and polynucleotide
PT encoding the protein, useful for diagnosing, treating or preventing
PT disorders associated with increased expression or activity of the
PT protein.
XX
XX
XX Example 2; SEQ ID NO 185; 149pp; English.
PS
XX
XX The invention relates to an isolated human GTP-activator protein for Rab-
CC like GTPase (GAPN) polypeptide (I), a sequence having 65% identity to
CC (I), a sequence in which at least 95% of deviations from (I) are
CC conservative substitutions, or a fragment of at least 8 contiguous amino
CC acids of (I). The polypeptide is useful for identifying a specific
CC binding partner for itself, by contacting the polypeptide in vivo to a
CC potential binding partner and determining if the polypeptide binding
CC partner binds to the polypeptide. (I) and a nucleic acid encoding the
CC polypeptide (II) are useful for diagnosing or monitoring a disease caused
CC by altered expression of GAPN, by determining the level of expression of
CC GAPN in a sample of nucleic acids or proteins that derives from a subject
CC suspected to have the disease, alterations from a normal level of
CC expression providing diagnostic and/or monitoring information. (I), (II)
CC or agonist of (I) is useful for treating or preventing a disorder
CC associated with decreased expression or activity of GAPN, and an
CC antagonist of (I) is useful for treating or preventing a disorder
CC associated with increased expression or activity of GAPN (all claimed).
CC (I) is useful as immunogen to raise antibodies that specifically
CC recognize GAPN proteins. (II) is useful to drive in vivo expression of
CC GAPN proteins, and as hybridization probes to detect, characterize and
CC quantify GAPN nucleic acids in and isolate GAPN nucleic acids from both
CC genomic and transcript-derived nucleic acid samples. This sequence
CC represents a 17-mer oligonucleotide spanning the GAP_N DNA sequence.
XX
XX
XX Sequence 17 BP; 3 A; 8 C; 4 G; 2 T; 0 U; 0 Other;
SQ
XX
XX Query Match 2.8%; Score 11.8; DB 1; Length 17;
XX Best Local Similarity 86.7%; Pred. NO. 5e+02;
XX Matches 13; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY 15 CTGCGGGTGACCGAG 29
DB 17 CTGCGGGTGACCGTG 3

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RESULT 1112
ADD20929/c
ID ADD20929 standard; DNA; 17 BP.
XX
XX ADD20929;
AC
XX
XX 15-JAN-2004 (first entry)
DT
XX Human GAP_N DNA 17-mer oligo #161.
DE

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RESULT 1113
ADD20688
ID ADD20688 standard; DNA; 17 BP.
XX
XX ADD20688;
AC
XX
XX 15-JAN-2004 (first entry)
DT
XX Human GAP_N DNA 17-mer oligo #120.
DE
XX gene therapy; antibody therapy; modulator of GAPN;
KM

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KM GTP-activator for Rab-like GTPase; GAP_N; immunogen; ss.
 XX Homo sapiens.
 OS
 XX WO2003033703-A2.
 PN
 XX 24-APR-2003.
 PD
 XX 11-OCT-2002; 2002WO-US032597.
 XX
 PF 15-OCT-2001; 2001US-0330323P.
 XX
 PR 15-OCT-2001; 2001US-0330323P.
 XX
 PA (AMSH) AMERSHAM BIOSCIENCES SV CORP.
 XX
 PI Zhang J;
 XX
 DR WPI; 2003-403224/38.
 XX
 XX Novel human GTP-activator protein for Rab-like GTPase and polynucleotide
 PT encoding the protein, useful for diagnosing, treating or preventing
 PT disorders associated with increased expression or activity of the
 PT protein.
 PS
 XX Example 2; SEQ ID NO 144; 149pp; English.
 XX
 CC The invention relates to an isolated human GTP-activator protein for Rab-
 CC like GTPase (GAPN) polypeptide (I), a sequence having 65% identity to
 CC (I), a sequence in which at least 95% of deviations from (I) are
 CC conservative substitutions, or a fragment of at least 8 contiguous amino
 CC acids of (I). The polypeptide is useful for identifying a specific
 CC binding partner for itself, by contacting the polypeptide in vivo to a
 CC potential binding partner and determining if the polypeptide binding
 CC partner binds to the polypeptide. (I) and a nucleic acid encoding the
 CC polypeptide (II) are useful for diagnosing or monitoring a disease caused
 CC by altered expression of GAPN, by determining the level of expression of
 CC GAPN in a sample of nucleic acids or proteins that derives from a subject
 CC suspected to have the disease, alterations from a normal level of
 CC expression providing diagnostic and/or monitoring information. (I), (II)
 CC or agonist of (I) is useful for treating or preventing a disorder
 CC associated with decreased expression or activity of GAPN, and an
 CC antagonist of (I) is useful for treating or preventing a disorder
 CC associated with increased expression or activity of GAPN (all claimed).
 CC (I) is useful as immunogen to raise antibodies that specifically
 CC recognize GAPN proteins. (II) is useful to drive in vivo expression of
 CC GAPN proteins, and as hybridization probes to detect, characterize and
 CC quantify GAPN nucleic acids in and isolate GAPN nucleic acids from both
 CC genomic and transcript-derived nucleic acid samples. This sequence
 CC represents a 17-mer oligonucleotide spanning the GAP_N DNA sequence.
 CC
 XX
 SQ Sequence 17 BP; 3 A; 8 C; 4 G; 2 T; 0 U; 0 Other;
 Query Match 2.8%; Score 11.8; DB 1; Length 17;
 Best Local Similarity 86.7%; Pred. No. 5e+02;
 Matches 13; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
 QY 383 CGACGACGCGCGCAA 397
 Db 2 CGACGACGCGCGCTA 16
 RESULT 1114
 ADD20931/C
 ID ADD20931 standard; DNA; 17 BP.
 XX
 AC ADD20931;
 XX
 XX 15-JAN-2004 (first entry)
 DT
 XX Human GAP_N DNA 17-mer oligo #163.
 DE
 XX gene therapy; antibody therapy; modulator of GAPN;
 KM GTP-activator for Rab-like GTPase; GAP_N; immunogen; ss.
 XX

OS Homo sapiens.
 XX
 PN WO2003033703-A2.
 XX
 PD 24-APR-2003.
 XX
 PF 11-OCT-2002; 2002WO-US032597.
 XX
 PR 15-OCT-2001; 2001US-0330323P.
 XX
 PA (AMSH) AMERSHAM BIOSCIENCES SV CORP.
 XX
 PI Zhang J;
 XX
 DR WPI; 2003-403224/38.
 XX
 XX Novel human GTP-activator protein for Rab-like GTPase and polynucleotide
 PT encoding the protein, useful for diagnosing, treating or preventing
 PT disorders associated with increased expression or activity of the
 PT protein.
 PS
 XX Example 2; SEQ ID NO 187; 149pp; English.
 XX
 CC The invention relates to an isolated human GTP-activator protein for Rab-
 CC like GTPase (GAPN) polypeptide (I), a sequence having 65% identity to
 CC (I), a sequence in which at least 95% of deviations from (I) are
 CC conservative substitutions, or a fragment of at least 8 contiguous amino
 CC acids of (I). The polypeptide is useful for identifying a specific
 CC binding partner for itself, by contacting the polypeptide in vivo to a
 CC potential binding partner and determining if the polypeptide binding
 CC partner binds to the polypeptide. (I) and a nucleic acid encoding the
 CC polypeptide (II) are useful for diagnosing or monitoring a disease caused
 CC by altered expression of GAPN, by determining the level of expression of
 CC GAPN in a sample of nucleic acids or proteins that derives from a subject
 CC suspected to have the disease, alterations from a normal level of
 CC expression providing diagnostic and/or monitoring information. (I), (II)
 CC or agonist of (I) is useful for treating or preventing a disorder
 CC associated with decreased expression or activity of GAPN, and an
 CC antagonist of (I) is useful for treating or preventing a disorder
 CC associated with increased expression or activity of GAPN (all claimed).
 CC (I) is useful as immunogen to raise antibodies that specifically
 CC recognize GAPN proteins. (II) is useful to drive in vivo expression of
 CC GAPN proteins, and as hybridization probes to detect, characterize and
 CC quantify GAPN nucleic acids in and isolate GAPN nucleic acids from both
 CC genomic and transcript-derived nucleic acid samples. This sequence
 CC represents a 17-mer oligonucleotide spanning the GAP_N DNA sequence.
 CC
 XX
 SQ Sequence 17 BP; 3 A; 8 C; 5 G; 1 T; 0 U; 0 Other;
 Query Match 2.8%; Score 11.8; DB 1; Length 17;
 Best Local Similarity 86.7%; Pred. No. 5e+02;
 Matches 13; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
 QY 15 CTCGCGGTACCGCAG 29
 Db 15 CTCGCGGTGACGCGTG 1
 RESULT 1115
 AAQ26549
 ID AAQ26549 standard; DNA; 18 BP.
 XX
 AC AAQ26549;
 XX
 XX 08-JAN-1993 (first entry)
 DT
 XX Control probe #4 for caucosoid RING1 gene.
 DE
 XX immunosuppressants; immunoenhancers; treatment; diagnosis; screening;
 KM immune disorders; transporter peptides; proteasome complex;
 KM MHC class I molecules; HLA; antigen processing; antigen presentation;
 KM autoimmune disease; ankylosing spondylitis; prenatal diagnosis;
 KM polymerase chain reaction; ss.
 XX

XX OS Synthetic.
 XX PN WO9211289-A1.
 XX PD 09-JUL-1992.
 XX PF 19-DEC-1991; 91WO-GB002278.
 XX PR 19-DEC-1990; 90GB-00027520.
 XX PR 16-SEP-1991; 91GB-00019711.
 XX PA (IMCR) IMPERIAL CANCER RES TECHNOLOGY.
 XX PI Trowedale J, Kelly AP, Glynn R, Powis SH;
 XX DR WPI, 1992-250030/30.
 XX PT DNA encoding RING4, RING10, RING11 AND RING12 proteins - for treatment
 XX PT and diagnosis of immune disorders and screening of new immunosuppressants
 XX PT and immuno-enhancers.
 XX PS Example 2; Page 40; 101pp; English.
 XX CC This probe was used together with AAQ26546-51 to analyse caucosoid
 XX CC controls by oligonucleotide typing, whilst investigating RING 11
 XX CC polymorphisms - see AAQ26544,5
 XX SQ Sequence 18 BP; 3 A; 6 C; 6 G; 3 T; 0 U; 0 Other;
 XX
 XX Query Match 2.8%; Score 11.8; DB 1; Length 18;
 XX Best Local Similarity 86.7%; Pred. No. 5.6e+02;
 XX Matches 13; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
 QY 267 CACCTGAGCAGGCG 281
 Db 2 CTCCTGAGCTGGGC 16
 RESULT 1116
 AAQ42271
 ID AAQ42271 standard; cDNA; 18 BP.
 XX
 AC AAQ42271;
 XX
 DT 25-MAR-2003 (revised)
 DT 13-SEP-1993 (first entry)
 XX
 DE PCR primer KBA-gamma2 to amplify 3'-end (constant region) of Pd.
 XX
 KW Type I ribosome-inactivating protein; ricin; momordin; immunocjugate;
 KW autoimmune disease; cell killing; toxin; rabbit muscle aldolase; ss.
 KM overlap extension polymerase chain reaction;
 XX
 OS Synthetic.
 XX PN WO9309130-A1.
 XX PD 13-MAY-1993.
 XX PF 04-NOV-1992; 92WO-US009487.
 XX PR 04-NOV-1991; 91US-00787567.
 XX PR 19-JUN-1992; 92US-00901707.
 XX
 PA (XOMA) XOMA CORP.
 XX
 PI Bernhard SL, Better MD, Carroll SF, Lane JA, Lei SP,
 XX WPI; 1993-167617/20.
 XX
 PT Analogues of type I ribosome inactivating protein - useful as cytotoxic
 PT agents, immuno toxins for treating auto immune diseases, cancer, graft

PT versus host disease and selective cell killing in-vivo.
 XX
 XX Example 10; Page 67; 163pp; English.
 XX
 CC A gelonin gene fusion to the 3'-end of the H65 Pd chain with the 21 amino
 CC acid rabbit muscle aldolase (RMA) linker sequence (20 amino acids from
 CC RMA, plus 1 amino acid introduced to facilitate cloning) was assembled in
 CC a three piece ligation. Primers KBA-gamma2 and RMA-G-1 (AAQ42271 and
 CC AAQ42272, respectively) were used to amplify the 3'-end (constant region)
 CC of the Pd gene from a source plasmid. (Updated on 25-MAR-2003 to correct
 CC PN field.)
 XX
 XX SQ Sequence 18 BP; 2 A; 7 C; 4 G; 5 T; 0 U; 0 Other;
 XX
 XX Query Match 2.8%; Score 11.8; DB 1; Length 18;
 XX Best Local Similarity 86.7%; Pred. No. 5.6e+02;
 XX Matches 13; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
 QY 344 CCGGCTGCTTACAG 358
 Db 3 CCGGCTGCTTACAG 17
 RESULT 1117
 AAQ34632
 ID AAQ34632 standard; cDNA; 18 BP.
 XX
 AC AAQ34632;
 XX
 DT 25-MAR-2003 (revised)
 DT 10-MAY-1993 (first entry)
 XX
 DS Human bcr-abl junction mRNA transcript antisense oligonucleotide.
 XX
 KW Leukaemia; treatment; blast crisis; specific; CML; translocation;
 KW Philadelphia chromosome; chronic myeloid; chronic myelogenous; leukemia;
 KW ss.
 KM
 XX
 OS Synthetic.
 XX PN WO9222303-A1.
 XX PD 23-DEC-1992.
 XX PF 15-JUN-1992; 92WO-US005035.
 XX PR 18-JUN-1991; 91US-00718302.
 XX PR 14-APR-1992; 92US-00869911.
 XX
 PA (UTEM) UNIV TEMPLE.
 XX
 PI Calabretta B, Gewirtz AM;
 XX WPI; 1993-017893/02.
 XX
 PT Treating Ph1-positive leukaemia(s) using bcr-abl anti-sense oligo-
 PT nucleotide(s) - to selectively inhibit leukemic cell proliferation
 PT without adversely affecting normal haematopoiesis.
 XX
 PS Disclosure; Page 51; 74pp; English.
 XX
 CC The sequence is that of an antisense oligonucleotide complementary (with
 CC two mismatches) to a target sequence of the bcr-abl mRNA transcript
 CC AAQ34631, which includes the bcr-abl translocation junction and not more
 CC than about 13 nucleotides of the abl-derived portion of the transcript.
 CC It is used as part of a method to treat leukaemias characterised by the
 CC Philadelphia chromosome translocation. It is highly selective and patient
 CC specific unlike conventional chemotherapy, which affects non-malignant
 CC cells. Dosage selection is thus less critical than with conventional
 CC treatment. (Updated on 25-MAR-2003 to correct PN field.)
 XX
 XX SQ Sequence 18 BP; 2 A; 6 C; 5 G; 5 T; 0 U; 0 Other;

Query Match 2.8%; Score 11.8; DB 1; Length 18;
 Best Local Similarity 86.7%; Pred. No. 5.6e+02;
 Matches 13; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 398 GAAGGCTTCTACGT 412
 Db 1 GAAGGCTTCTACGT 15

RESULT 1118
 AAQ34633
 ID AAQ34633 standard; cDNA; 18 BP.

XX AAQ34633;

AC 25-MAR-2003 (revised)
 DT 10-MAY-1993 (first entry)

DE Human bcr-abl junction mRNA transcript antisense oligonucleotide.

KX Leukaemia; treatment; blast crisis; specific; CML; translocation;
 KW Philadelphia chromosome; chronic myeloid; chronic myelogenous; leukemia;
 KW ss.

OS Synthetic.

XX WO9222303-A1.

FN 23-DEC-1992.

PD 15-JUN-1992; 92WO-US005035.

XX 18-JUN-1991; 91US-00718302.

PR 14-APR-1992; 92US-00869911.

XX (UTEM) UNIV TEMPLE.

XX Calabretta B, Gewirtz AM;

DR WPI, 1993-017893/02.

XX Treating Ph1-positive leukemia(s) using bcr-abl anti-sense oligo-
 nucleotide(s) - to selectively inhibit leukemic cell proliferation
 without adversely affecting normal haematopoiesis.

PS Disclosure; Page 51; 74pp; English.

CC The sequence is that of an antisense oligonucleotide complementary to a
 CC target sequence of the bcr-abl mRNA transcript AAQ34631, which includes
 CC the bcr-abl translocation junction and not more than about 13 nucleotides
 CC of the abl-derived portion of the transcript. It is used as part of a
 CC method to treat leukemias characterised by the Philadelphia chromosome
 CC translocation. It is highly selective and patient specific unlike
 CC conventional chemotherapy, which affects non-malignant cells. Dosage
 CC selection is thus less critical than with conventional treatment.
 CC (Updated on 25-MAR-2003 to correct PN field.)

CC Sequence 18 BP; 2 A; 5 C; 6 G; 5 T; 0 U; 0 Other;

Qy Query Match 2.8%; Score 11.8; DB 1; Length 18;
 Best Local Similarity 86.7%; Pred. No. 5.6e+02;
 Matches 13; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 398 GAAGGCTTCTACGT 412
 Db 1 GAAGGCTTCTACGT 15

RESULT 1119
 AAQ34638/C
 ID AAQ34638 standard; cDNA; 18 BP.
 XX
 AC AAQ34638;

XX 25-MAR-2003 (revised)
 DT 10-MAY-1993 (first entry)

DE Human b1a2 breakpoint sequence.

KX Leukaemia; treatment; blast crisis; specific; CML; translocation;
 KW Philadelphia chromosome; chronic myeloid; chronic myelogenous; leukemia;
 KW bcr; abl; ss.

OS Synthetic.

XX WO9222303-A1.

FN 23-DEC-1992.

PD 15-JUN-1992; 92WO-US005035.

XX 18-JUN-1991; 91US-00718302.

PR 14-APR-1992; 92US-00869911.

XX (UTEM) UNIV TEMPLE.

XX Calabretta B, Gewirtz AM;

DR WPI, 1993-017893/02.

XX Treating Ph1-positive leukemia(s) using bcr-abl anti-sense oligo-
 nucleotide(s) - to selectively inhibit leukemic cell proliferation
 without adversely affecting normal haematopoiesis.

PS Example; Page 38; 74pp; English.

CC The sequence is that of the breakpoint junction from RNA isolated from
 CC cell line ALL-1 derived from a Ph1-positive ALL patient (Brixson et al.
 CC 1986). The junction sequence was used in the prepn. of antisense
 CC oligonucleotides which can be used as part of a method to treat
 CC leukemias characterised by the Philadelphia chromosome translocation.
 CC This method is highly selective and patient specific unlike conventional
 CC chemotherapy, which affects non-malignant cells. Dosage selection is thus
 CC less critical than with conventional treatment. (Updated on 25-MAR-2003
 CC to correct PN field.)

CC Sequence 18 BP; 5 A; 6 C; 5 G; 2 T; 0 U; 0 Other;

Qy Query Match 2.8%; Score 11.8; DB 1; Length 18;
 Best Local Similarity 86.7%; Pred. No. 5.6e+02;
 Matches 13; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 398 GAAGGCTTCTACGT 412
 Db 18 GAAGGCTTCTACGT 4

RESULT 1120
 AAQ64697
 ID AAQ64697 standard; DNA; 18 BP.

XX AAQ64697;

AC 25-MAR-2003 (revised)

DT 03-JAN-1995 (first entry)

DE b1a2 junction antisense oligonucleotide.

KX Translocation; bcr-abl; b2a2; L-6; b3a2; K-28; b1a2; proliferation;
 KW neoplastic cell; cancer; tumour; proto-oncogene; antisense;
 KW oligonucleotide; chronic myelogenous leukemia; CML;
 KW acute lymphocytic leukemia; ALL; ss.

OS Synthetic.

XX Key Location/Qualifiers

[illegible]

PR 07-DEC-1992; 92US-00988849.
PR 19-JAN-1993; 93US-00008895.
XX
PA (RIBO-) RIBOZYME PHARM INC.
XX
PI Sullivan SM, Draper KG;
XX
DR WPI; 1994-048853/06.
XX
PT Enzymatic RNA molecules which cleave mRNA - used to treat or prevent
PT inflammatory, arthritic, stenotic or cardiovascular diseases or
PT conditions.
XX
PS Claim 3; Page 16; 65pp; English.

This is a TWF-alpha mRNA target sequence (nucleotide no. 1084) of an
CC enzymatic RNA molecule (ribozyme) which cleaves mRNA associated with the
CC development or maintenance of a psoriatic or asthmatic condition. The
CC developmnet or maintenance of a psoriatic or asthmatic condition. The
CC concn. of the ribozyme necessary to effect a therapeutic treatment is
CC lower than that of an antisense oligonucleotide and the specificity of
CC action is higher. (Updated on 25-MAR-2003 to correct PN field.)
CC

SQ Sequence 18 BP; 7 A; 5 C; 3 G; 3 T; 0 U; 0 Other;

	Query Match	Best Local Similarity	Score	Pred.	No.	Mismatches	Indels	Gaps
Oy	44	TGGCACCACCTAGAGA	58					
Db	2	TGGCACCACCTAGAGA	16					

RESULT 1122
AAQ76140
ID AAQ76140 standard; DNA; 18 BP.
XX
AC AAQ76140;
XX
DT 25-MAR-2003 (revised)
DT 28-JUL-1995 (first entry)
XX
DE Fd gene 3' (constant region) PCR primer KBA-gamma2.
XX
KM Gelonin; cytotoxic therapeutic agents; autoimmune disease; cancer;
KM gralt-verarus-host disease; PCR primer; Fd gene; ss..
XX
OS Synthetic.
XX
PN WO9426910-A1.
XX
PD 24-NOV-1994.
XX
PF 12-MAY-1994; 94WO-US005348.
XX
PR 12-MAY-1993; 93US-00064691.
XX
PA (XOMA) XOMA CORP.
XX
PI Better MD, Carroll SF, Studnicka GM;
XX
WPI; 1995-006804/01.
XX
PT Polynucleotide(s) encoding type I ribosome-inactivating proteins - which
PT are suitable for use as components of cytotoxic therapeutic agents.
XX
PS Example 14; Page 93; 221pp; English.

AAQ76140 and AAQ76141 are a pair of primers for the PCR amplification of
CC the Fd gene 3' (constant region), they were used in the construction of a
CC Fd;RMA linker:gelonin cytotoxic therapeutic agent (CTA),
CC immunocongugate. CTAs can be used in the treatment of diseases where the
CC elimination of a particular cell type is desired, such as autoimmune

CC disease, cancer and graft-versus-host disease. (Updated on 25-MAR-2003 to correct FN field.)

XX Sequence 18 BP; 2 A; 7 C; 4 G; 5 T; 0 U; 0 Other;

Query Match 2.8%; Score 11.8; DB 1; Length 18;
Best Local Similarity 86.7%; Pred. No. 5.6e+02;
Matches 13; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

344 CCGGCTGCTCTACAG 358
3 CCGGCTGCTCTACAG 17

RESULT 1123
AA087648/c
ID AA087648 standard; DNA; 18 BP.

AC AA087648;

DT 19-DEC-1995 (first entry)

DE Chick antisense oligonucleotide to p75 NGFR gene.

XX Oligonucleotide; antisense; down-regulation; expression; trauma;
XX nerve growth factor receptor; neurodegenerative disease; Alzheimer's;
XX Parkinson's; Huntington's disease; multiple sclerosis;
XX vascular ischaemia; stroke; ss.

OS Synthetic.

PN W09511253-A1.

PD 27-APR-1995.

PF 18-OCT-1994; 94MO-AU000631.

PR 18-OCT-1993; 93AU-00001870.

PA (HALL-) HALL INST MEDICAL RES WALTER & ELIZA.

PI Barrett GL;

DR WPI; 1995-170186/22.

XX Anti-sense oligonucleotide(s) to nerve growth factor receptor gene - of
PT p75 NGFR, down-regulate expression and enhance neurone survival; for
PT treating cerebral palsy, Alzheimer's disease, stroke, etc.

PS Example 3; Page 35; 59pp; English.

XX The sequence of an antisense oligonucleotide to the chick nerve growth
CC factor receptor (NGFR) gene which was used as a control for the survival
CC of mouse dorsal root ganglia (DRG) cells treated with oligonucleotides
CC AA087641-2. These oligonucleotides are antisense sequences directed at
CC down-regulating the expression of the gene encoding the mouse p75 NGFR
CC gene. The oligonucleotides can be used in methods to treat
CC neurodegenerative conditions associated with disease and/or trauma such
CC as Alzheimer's, Parkinson's or Huntington's disease, multiple sclerosis,
CC vascular ischaemia associated with stroke, etc

XX Sequence 18 BP; 3 A; 4 C; 7 G; 4 T; 0 U; 0 Other;

Query Match 2.8%; Score 11.8; DB 1; Length 18;
Best Local Similarity 86.7%; Pred. No. 5.6e+02;
Matches 13; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 169 TGTACTACGAGTCCA 183
17 TGTACAGCGAGTCCA 3

RESULT 1124

AA092348

ID AA092348 standard; DNA; 18 BP.

AC AA092348;

DT 25-MAR-2003 (revised)
DT 01-JAN-1996 (first entry)

DE PCR primer KBA-gamma2 for linking RMA linker with Fd gene.

XX RMA linker segment; Fd; PCR primer; ss.

OS Synthetic.

PN US5416202-A.

PD 16-MAY-1995.

PF 09-DEC-1992; 92US-00988430.

PR 04-NOV-1991; 91US-00787567.

PR 19-JUN-1992; 92US-00901707.

XX (XOMA) XOMA CORP.

PI Lei S, Carroll SF, Lane JA, Bernhard SL, Better MD,

DR WPI; 1995-193480/25.

XX Polynucleotide(s) encoding gelonin analogues - having a cysteine residue
PT for intermolecular bonding for the prodn. of immuno-toxin(s).

PS Example; Col 41; 66pp; English.

XX Plasmid pSH4 contains an Fd gene linked in frame to the RMA linker
CC sequence. The RMA gene segment was linked to the 3'-end of Fd by overlap
CC extension PCR as follows. The 3'-end (constant region) of the Fd gene was
CC amplified by PCR from a source plasmid with the primers KBA-gamma2 and
CC RMAP-1. The product of this reaction was mixed with primer RMA-76, which
CC annealed to the amplified product of the first reaction, and the mixture
CC was amplified with primers KBA-gamma2 and RMAP-2. (Updated on 25-MAR-2003
CC to correct PR field.)

XX Sequence 18 BP; 2 A; 7 C; 4 G; 5 T; 0 U; 0 Other;

Query Match 2.8%; Score 11.8; DB 1; Length 18;
Best Local Similarity 86.7%; Pred. No. 5.6e+02;
Matches 13; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

344 CCGGCTGCTCTACAG 358
3 CCGGCTGCTCTACAG 17

RESULT 1125

AA028318/c
ID AA028318 standard; DNA; 18 BP.

AC AA028318;

DT 19-NOV-1996 (first entry)

DE Multi-G oligonucleotide rb SCR (random).

XX Multi-G oligonucleotide; antisense sequence; c-myc; nuclease resistant;
XX phosphorothioate linkage; phosphorothioate linkage; inhibitor; therapy;
XX cell proliferation; smooth muscle cell; proliferation protein;
XX vascular restenosis; arterial restenosis; ss.

OS Synthetic.

PN W09611266-A2.

XX

PD 18-APR-1996.
 XX
 PF 03-OCT-1995; 95WO-US012770.
 XX
 PR 05-OCT-1994; 94US-00318458.
 XX
 PA (AMGE-) AMGEN INC.
 XX
 PI Burgess TL, Farrell CL, Fisher EF;
 XX
 DR WPI; 1996-209848/21.
 XX
 PT New modified oligo:nucleotide(s) contg. consecutive guanine residues -
 PT inhibit proliferation of smooth muscle cells, esp. to prevent arterial
 XX restenosis.
 XX
 PS Example 1; Page 41; 67pp; English.
 XX
 CC AAT28317-T28347 represent multi-G oligonucleotides. AAT28317-T28324 are
 CC based on an antisense sequence against the c-myc target. These sequences
 CC are oligonucleotides of the invention. These sequences can be modified to
 CC become more nuclease resistant, using phosphorothioate,
 CC phosphorodithioate, or 3'-carbon modified links. To screen for modified
 CC multi-G sequences that inhibit cell proliferation, cultured smooth muscle
 CC cells that are arrested in the G0 phase, are induced to proliferate in
 CC the presence of the multi-G sequence. The cultured smooth muscle cells
 CC used in this method are attached to a solid support, and growth arrest is
 CC achieved on a starvation medium, followed by transfer to a normal growth
 CC medium to induce proliferation. The compounds that provide over 50%
 CC inhibition at a set dosage are selected as being useful for inhibiting
 CC vascular restenosis. The multi-G oligonucleotides are used to inhibit
 CC proliferation of smooth muscle cells, such as to prevent arterial
 CC restenosis. These sequences are not antisense sequences, but are thought
 CC to work in a similar way. The sequences are thought to act by binding to
 CC proteins involved in the proliferation process. Compounds containing
 CC these multi-G oligonucleotides are not toxic, and their effect on cell
 CC proliferation is fully reversible
 XX
 SQ Sequence 18 BP; 0 A; 6 C; 9 G; 3 T; 0 U; 0 Other;
 Query Match 2.8%; Score 11.8; DB 1; Length 18;
 Best Local Similarity 86.7%; Pred. No. 5.6e+02;
 Matches 13; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
 QY 379 ACCGCGACGACGCGC 393
 DB 15 ACCGCGCGACGCGC 1
 RESULT 1126
 AAT60160/c
 ID AAT60160 standard; DNA; 18 BP.
 XX
 AC AAT60160;
 XX
 DT 01-DEC-1997 (first entry)
 XX
 DE Collagen gene promoter region binding oligomer Oligo 164 APS.
 XX
 XX Triplex; inhibition; collagen gene; promoter; pathological fibrosis;
 KW myocardial fibrosis; hypertensive heart disease; atherosclerosis;
 KW restenosis; liver cirrhosis; lung fibrosis; skin fibrosis; scleroderma;
 KW hypertrophic scar; burn injury; rat; polypurine; polypyrimidine; ss.
 XX
 OS Synthetic.
 XX
 FH Key Location/Qualifiers
 FT 1.18
 FT misc_feature
 FT /tag=a
 FT /note="Phosphorothioate linkages"
 XX
 XX MO9710254-A1.

PD 20-MAR-1997.
 XX
 PF 12-SEP-1996; 96WO-US014640.
 XX
 PR 15-SEP-1995; 95US-00528836.
 PR 11-SEP-1996; 96US-00712357.
 XX
 PA (GUNT/) GUNTAKA R V.
 XX
 PI Guntaka RV, Weber KT, Kovacs A, Kandala J;
 XX
 DR WPI; 1997-202172/18.
 XX
 PT Triplex forming oligomer binds to collagen gene promoter region - used to
 PT impede pathological fibrosis etc.
 XX
 PS Claim 18; Page 36; 52pp; English.
 XX
 CC An oligomer has been produced which is capable of inhibiting expression
 CC of a collagen gene. The present sequence represents a specifically
 CC claimed oligomer Oligo 164 APS, which binds to the polypurine-
 CC polypyrimidine region of the rat alpha1(I) collagen gene promoter region.
 CC The oligomer may be used to impede pathological fibrosis which is
 CC associated with myocardial fibrosis in hypertensive heart diseases,
 CC atherosclerosis, restenosis, liver cirrhosis, lung fibrosis, and skin
 CC fibrosis found in scleroderma, in hypertrophic scars and in skin
 CC following burn injury. The oligomer inhibits expression of a collagen
 CC gene after insertion into a cell by causing an intracellular reaction
 CC which inhibits gene expression. The oligomer is preferably a triplex
 CC forming oligomer (TRO) which is targeted to a 30-mer polypurine
 CC oligonucleotide corresponding to the noncoding strand of the promoter
 CC between -170 and -140. This section was chosen due to its binding
 CC stability at physiological pH
 XX
 SQ Sequence 18 BP; 7 A; 0 C; 11 G; 0 T; 0 U; 0 Other;
 Query Match 2.8%; Score 11.8; DB 1; Length 18;
 Best Local Similarity 86.7%; Pred. No. 5.6e+02;
 Matches 13; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
 QY 362 CTTCCTCACTTCCT 376
 DB 18 CCTCTCCCTTCCT 4
 RESULT 1127
 AAT60165/c
 ID AAT60165 standard; DNA; 18 BP.
 XX
 AC AAT60165;
 XX
 DT 01-DEC-1997 (first entry)
 XX
 DE Collagen gene promoter region binding oligomer Oligo 164 AP.
 XX
 XX Triplex; inhibition; collagen gene; promoter; pathological fibrosis;
 KW myocardial fibrosis; hypertensive heart disease; atherosclerosis;
 KW restenosis; liver cirrhosis; lung fibrosis; skin fibrosis; scleroderma;
 KW hypertrophic scar; burn injury; rat; polypurine; polypyrimidine; ss.
 XX
 OS Synthetic.
 XX
 FH Key Location/Qualifiers
 FT 1.18
 FT misc_feature
 FT /tag=a
 FT /note="Phosphorothioate linkages"
 XX
 XX MO9710254-A1.
 XX
 PF 12-SEP-1996; 96WO-US014640.
 XX
 PR 15-SEP-1995; 95US-00528836.
 PR 11-SEP-1996; 96US-00712357.
 XX
 PA (GUNT/) GUNTAKA R V.
 XX

PI Guntaka RV, Weber KT, Kovacs A, Kandala J;
 XX WPI; 1997-202172/18.
 XX Triplex forming oligomer binds to collagen gene promoter region - used to
 PT impede pathological fibrosis etc.
 XX Example 4; Page 35; 52pp; English.
 CC An oligomer has been produced which is capable of inhibiting expression
 CC of a collagen gene. The present sequence represents an oligomer Oligo 164
 CC AP, which binds to the polypurine-polypyrimidine region of the rat
 CC alpha(1) collagen gene promoter region. The oligomer may be used to
 CC impede pathological fibrosis which is associated with myocardial fibrosis
 CC in hypertensive heart diseases, atherosclerosis, restenosis, liver
 CC cirrhosis, lung fibrosis, and skin fibrosis found in scleroderma, in
 CC hypertrophic scars and in skin following burn injury. The oligomer
 CC inhibits expression of a collagen gene after insertion into a cell by
 CC causing an intracellular reaction which inhibits gene expression. The
 CC oligomer is preferably a triplex forming oligomer (TRO) which is targeted
 CC to a 30-mer polypurine oligonucleotide corresponding to the noncoding
 CC strand of the promoter between -170 and -140. This section was chosen due
 CC to its binding stability at physiological pH
 CC XX
 SQ Sequence 18 BP; 7 A; 0 C; 11 G; 0 T; 0 U; 0 Other;
 Query Match 2.8%; Score 11.8; DB 1; Length 18;
 Best Local Similarity 86.7%; Pred. No. 5.6e+02;
 Matches 13; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
 QY 362 CTTCCTCACTTCTCT 376
 DB 18 CCTCTCCCTTCTCT 4
 RESULT 1128
 AAT60158/C
 ID AAT60158 standard; DNA; 18 BP.
 AC AAT60158;
 XX 01-DEC-1997 (first entry)
 DT
 DE Collagen gene promoter region binding oligomer Oligo 147 P.
 XX Triplex; inhibition; collagen gene; promoter; pathological fibrosis;
 KM myocardial fibrosis; hypertensive heart disease; atherosclerosis;
 KM restenosis; liver cirrhosis; lung fibrosis; skin fibrosis; scleroderma;
 KM hypertrophic scar; burn injury; rat; polypurine; polypyrimidine; ss.
 OS Synthetic.
 XX MO9710254-A1.
 PN 20-MAR-1997.
 PD 12-SEP-1996; 96WO-US014640.
 PF 15-SEP-1995; 95US-00528836.
 PR 11-SEP-1996; 96US-00712357.
 XX (GUNT/) GUNTAKA R V.
 PA Guntaka RV, Weber KT, Kovacs A, Kandala J;
 PI WPI; 1997-202172/18.
 DR Triplex forming oligomer binds to collagen gene promoter region - used to
 XX impede pathological fibrosis etc.
 PT Claim 18; Page 34; 52pp; English.
 PS An oligomer has been produced which is capable of inhibiting expression
 CC

CC of a collagen gene. The present sequence represents a specifically
 CC claimed oligomer Oligo 147 P, which binds to the polypurine-
 CC polypyrimidine region of the rat alpha(1) collagen gene promoter region.
 CC The oligomer may be used to impede pathological fibrosis which is
 CC associated with myocardial fibrosis in hypertensive heart diseases,
 CC atherosclerosis, restenosis, liver cirrhosis, lung fibrosis, and skin
 CC fibrosis found in scleroderma, in hypertrophic scars and in skin
 CC following burn injury. The oligomer inhibits expression of a collagen
 CC gene after insertion into a cell by causing an intracellular reaction
 CC which inhibits gene expression. The oligomer is preferably a triplex
 CC forming oligomer (TRO) which is targeted to a 30-mer polypurine
 CC oligonucleotide corresponding to the noncoding strand of the promoter
 CC between -170 and -140. This section was chosen due to its binding
 CC stability at physiological pH
 CC XX
 SQ Sequence 18 BP; 7 A; 0 C; 11 G; 0 T; 0 U; 0 Other;
 Query Match 2.8%; Score 11.8; DB 1; Length 18;
 Best Local Similarity 86.7%; Pred. No. 5.6e+02;
 Matches 13; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
 QY 362 CTTCCTCACTTCTCT 376
 DB 18 CCTCTCCCTTCTCT 4
 RESULT 1129
 AAT61597/C
 ID AAT61597 standard; DNA; 18 BP.
 AC AAT61597;
 XX 22-OCT-1997 (first entry)
 DT
 DE Humicola lanuginosa lipase gene fragment PCR primer 4639.
 XX Lipase; polypeptide variant; in vivo recombination; shuffling;
 KM Saccharomyces cerevisiae; Humicola lanuginosa; detergent;
 KM polymerase chain reaction; PCR; primer; ss.
 OS Synthetic.
 XX WO9707205-A1.
 PN 27-FEB-1997.
 PD 12-AUG-1996; 96WO-DK000343.
 PF 11-AUG-1995; 95DK-00000907.
 PR 20-SEP-1995; 95DK-00001047.
 XX (NOVO) NOVO-NORDISK AS.
 PA Okkela JS;
 PI WPI; 1997-165289/15.
 DR Preparing polypeptide variants with improved functional properties - by
 XX in vivo recombination between opened plasmid and homologous DNA, to
 PT produce e.g. enzymes with improved washing and dishwashing properties.
 XX Example 3; Page 41; 68pp; English.
 XX PCR primers (AAT61596-604) are used to amplify fragments of the Humicola
 CC lanuginosa lipase gene coding sequence (see also AAT61593). For example,
 CC primer 4639 (AAT61597) can be used with primer 5164 (AAT61598) to make a
 CC 900 bp fragment. The lipase gene fragments are used in an improved method
 CC of preparing positive polypeptide variants (see also AAT61557-58). This
 CC involves shuffling opening plasmid and homologous DNA sequences in an
 CC iterative in vivo recombination system using a eukaryotic cell (such as
 CC yeast) as a recombination host cell
 CC XX
 SQ Sequence 18 BP; 3 A; 7 C; 6 G; 2 T; 0 U; 0 Other;

Query Match 2.8%; Score 11.8; DB 1; Length 18;
 Best Local Similarity 86.7%; Pred. No. 5.6e+02;
 Matches 13; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 305 GAGCCCCGGGACCG 319
 |||||
 DB 15 GATCCCCGGGTACCG 1

RESULT 1130
 AAT61608/c
 ID AAT61608 standard; DNA; 18 BP.

XX AAT61608;
 XX
 DT 22-OCT-1997 (first entry)
 XX
 DE Humicola lanuginosa lipase gene fragment PCR primer 4699.

XX
 KW Lipase; polypeptide variant; in vivo recombination; shuffling;
 KW Saccharomyces cerevisiae; Humicola lanuginosa; detergent;
 KW polymerase chain reaction; PCR; primer; ss.

XX Synthetic.

XX WO9707206-A1.

XX 27-FEB-1997.

XX 12-AUG-1996; 96WO-DK000344.

XX 11-AUG-1995; 95DK-00000907.

XX 20-SEP-1995; 95DK-00001047.

XX (NOVO) NOVO-NORDISK AS.

XX Okkels JS;

XX WPI; 1997-165290/15.

XX
 PT in vivo recombination between opened plasmid and homologous DNA, to
 PT produce e.g. enzymes with improved washing and dishwashing properties.

XX Example 3; Page 41; 68pp; English.

XX PCR primers (AAT61607-615) are used to amplify fragments of the Humicola
 CC lanuginosa lipase gene coding sequence (see also AAT61593). For example,
 CC primer 4699 (AAT61608) can be used with primer 5164 (AAT61609) to make a
 CC 900 bp fragment. The lipase gene fragments are used in an improved method
 CC of preparing positive polypeptide variants (see also AAM13561-62). This
 CC involves shuffling opened plasmid and homologous DNA sequences in an
 CC iterative in vivo recombination system using a eukaryotic cell (such as
 CC yeast) as a recombination host cell

XX Sequence 18 BP; 3 A; 7 C; 6 G; 2 T; 0 U; 0 Other;

Query Match 2.8%; Score 11.8; DB 1; Length 18;
 Best Local Similarity 86.7%; Pred. No. 5.6e+02;
 Matches 13; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 305 GAGCCCCGGGACCG 319
 |||||
 DB 15 GATCCCCGGGTACCG 1

RESULT 1131
 AAV44606
 ID AAV44606 standard; DNA; 18 BP.
 XX
 AC AAV44606;
 XX

DT 24-NOV-1998 (first entry)

XX Human uncoupling protein-2 UCP2 gene reverse primer hUCP2g.e4r2.

XX
 KW Uncoupling protein-2; UCP2 gene; human; respiration; thermogenesis;
 KW obesity; hyperinsulinaemia; glucose intolerance; diabetes; syndrome X;
 KW hypothermia; wasting; cachexia; anorexia; inflammation; fever;
 KW hyperthermia; gene therapy; diagnosis; PCR; primer; ss.

XX Synthetic.

XX Homo sapiens.

XX WO9831396-A1.

XX 23-JUL-1998.

XX 22-APR-1997; 97WO-US006864.

XX 15-JAN-1997; 97US-0034960P.

XX (UYDU-) UNIV DUKE.
 PA (REGC) UNIV CALIFORNIA.
 PA (CNRS) CENT NAT RECH SCI.

PI Surwit RS, Collins SA, Warden CH, Seldin MF, Ricquier D;
 PI Bouilland P;

XX WPI; 1998-413823/35.

XX
 PT Method for treating disease associated with altered UCP-2 expression - by
 PT administering agent which enhances or inhibits UCP-2 activity,
 PT effectively to treat obesity, diabetes, fever, hyperthermia, cachexia
 PT etc.

XX Example IX; Page 46; 98pp; English.

XX Primer hUCP2g.e4r2 is used with forward primer hUCP2g.e4f2 (see AAV44605)
 CC in the PCR amplification of bp 1858-2281 in exon 4 of the human
 CC uncoupling protein-2 (UCP2) gene. Primers (see AAV44603-18) were designed
 CC to amplify hUCP2 exons 4, 6, 7 and 8 from genomic DNA. Common amino acid
 CC variants (see AAV69166) are present in exons 4, 6 and 8; A55V in exon 4,
 CC N190S in exon 6, and L294M in exon 8 (see also AAV44595). Restriction
 CC enzymes have been identified that would differentially digest each
 CC of the alleles. The invention relates to a method for treating disease
 CC associated with altered UCP2 expression, such as obesity, diabetes,
 CC syndrome X, hypothermia, hyperinsulinaemia, glucose intolerance, wasting,
 CC anorexia, inflammation, cachexia, fever or hyperthermia

XX Sequence 18 BP; 4 A; 3 C; 8 G; 3 T; 0 U; 0 Other;

Query Match 2.8%; Score 11.8; DB 1; Length 18;
 Best Local Similarity 86.7%; Pred. No. 5.6e+02;
 Matches 13; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 330 GCGAGCAGCAGGCG 344
 |||||
 DB 4 GTGAGAGCAGCAGGCG 18

RESULT 1132
 AAV46204
 ID AAV46204 standard; DNA; 18 BP.

XX AAV46204;

XX 16-OCT-1998 (first entry)

XX Human HLA-A primer II-214m.

XX Histocompatibility locus antigen; HLA-A class I; human; class typing;
 KW donor; host; tissue transplantation; primer; ss.

XX Synthetic.

OS Homo sapiens.
 XX
 XX WO9826091-A2.
 XX
 PD 18-JUN-1998.
 XX
 PF 12-DEC-1997; 97WO-CA000955.
 XX
 PR 12-DEC-1996; 96US-00766189.
 XX
 PA (VISI-) VISIBLE GENETICS INC.
 XX
 PI Blasczyk RH, Leushner J;
 XX
 DR WPI; 1998-348544/30.
 XX
 PT HLA Class I typing - by primer-based amplification of target DNA using
 PT group-specific untranslated region primer pair.
 XX
 PS Claim 4; Page 122; 185pp; English.
 XX
 CC AAV46054 and AAV46200-V46264 are primers used in isolating human
 CC histocompatibility locus antigen (HLA-A) Class I alleles which are used
 CC in a novel method of HLA Class I typing. The method involves combining a
 CC group-specific untranslated region primer pair with a target DNA to allow
 CC primer-based amplification of the DNA, and determining whether a nucleic
 CC acid product is produced by the amplification. The ability of the primer
 CC pair to produce a product is associated with a particular HLA Class I gene.
 CC The methods can be used for typing the 3 classical HLA Class I genes
 CC (comprising the loci HLA-A, HLA-B, and HLA-C) in e.g. donors and hosts
 CC for tissue transplantation. The initial group specific amplification
 CC allows a PCR based separation of haplotypes in 95% of patient samples.
 CC The subsequent sequencing can provide for high-resolution typing
 CC
 XX
 SQ Sequence 18 BP; 2 A; 5 C; 10 G; 1 T; 0 U; 0 Other;
 QY
 Query Match 2.8%; Score 11.8; DB 1; Length 18;
 Best Local Similarity 86.7%; Pred. No. 5.6e+02;
 Matches 13; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
 138 CGCGTCGGCGGTGAG 152
 Db 1 CGCGTCGGCGGTGAG 15

RESULT 1133
 AAV54355
 ID AAV54355 standard; DNA; 18 BP.
 XX
 AC AAV54355;
 XX
 DT 15-JAN-1999 (first entry)
 XX
 DE Human cell type PCR anchor primer K3.
 XX
 KM Identification; gene expression; conserved motif; target; metastatic;
 KM non-metastatic; non-cancerous tissue; nucleic acid analysis; PCR primer;
 KM ss.
 XX
 OS Synthetic.
 OS Homo sapiens.
 XX
 XX WO9839480-A1.
 XX
 PD 11-SEP-1998.
 XX
 PF 03-MAR-1998; 98WO-US004094.
 XX
 PR 03-MAR-1997; 97US-00765522.
 XX
 PA (HAOO/) HAOCI T M.
 XX
 PI Haqi TM;

XX
 DR WPI; 1998-506373/43.
 XX
 PT Method of analysing nucleic acid in a sample - used for analysing
 PT expressed genes, and distinguishing between metastatic, non-metastatic
 PT and non-cancerous tissues.
 XX
 PS Example 1; Page 24; 55pp; English.
 XX
 CC A novel method has been developed of analysing a nucleic acid in a
 CC sample. The method comprises: (a) providing: (i) a sample containing
 CC nucleic acid; (ii) a first primer having a sequence of which at least a
 CC portion is at least partially complementary to a natural common non-
 CC coding sequence on a portion of the nucleic acid of the sample; (iii) a
 CC second primer having a sequence of which at least a portion is at least
 CC partially complementary to a restriction enzyme recognition sequence
 CC present on a portion of the nucleic acid of the sample; and (iv) a
 CC polymerase and polymerase chain reaction (PCR) reagents; (b) preparing
 CC the nucleic acid from the sample under conditions so as to produce
 CC amplifiable nucleic acid; (c) amplifying the nucleic acid with the first
 CC and second primers, the polymerase and the PCR reagents under conditions
 CC such that amplified product is generated; and (d) detecting the amplified
 CC product. The method can be used for analysing expressed genes in multiple
 CC samples, especially in human cancer cells. The method can also be used to
 CC distinguish between metastatic and non-metastatic cancer tissues as well
 CC as between normal and cancerous tissue. It can also be used to detect
 CC drug resistance. The method can also be used to classify and identify
 CC microorganisms. The present sequence represents a PCR anchor primer used
 CC in an example from the present invention
 CC
 XX
 SQ Sequence 18 BP; 2 A; 7 C; 5 G; 2 T; 0 U; 2 Other;
 QY
 Query Match 2.8%; Score 11.8; DB 1; Length 18;
 Best Local Similarity 72.2%; Pred. No. 5.6e+02;
 Matches 13; Conservative 1; Mismatches 4; Indels 0; Gaps 0;
 250 CGCGTCGGCGCCACGGTGC 267
 Db 1 CGCGATCCGCCRCNATGC 18

RESULT 1134
 AAV35048
 ID AAV35048 standard; DNA; 18 BP.
 XX
 AC AAV35048;
 XX
 DT 13-OCT-1998 (first entry)
 XX
 DE Hordeum vulgare MLO gene PCR primer.
 XX
 KM Barley; MLO; mildew; pathogen; resistance; PCR primer; ss.
 XX
 OS Synthetic.
 OS Hordeum vulgare.
 XX
 PN WO9804586-A2.
 XX
 PD 05-FEB-1998.
 XX
 PF 29-JUL-1997; 97WO-GB002046.
 XX
 PR 29-JUL-1996; 96GB-00015879.
 PR 30-OCT-1996; 96GB-00022626.
 PR 07-MAR-1997; 97GB-00004789.
 XX
 PA (INNE-) INNES CENT INNOVATIONS LTD JOHN.
 XX
 PI Schulzelefer PMJ, Panstruga R, Bueschges R;
 XX
 DR WPI; 1998-159149/14.
 XX
 PT New isolated MLO gene of barley - used to develop products for the

PT production of transgenic plants which have increased pathogen resistance.
 XX
 PS Disclosure, Page 90; 150pp; English.
 CC The sequence is that of a PCR primer used in the amplification of the MLO
 CC gene
 CC
 XX Sequence 18 BP; 1 A; 4 C; 7 G; 6 T; 0 U; 0 Other;
 SQ
 Query Match 2.8%; Score 11.8; DB 1; Length 18;
 Best Local Similarity 86.7%; Pred. No. 5.6e+02;
 Matches 13; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
 QY 147 GTGGAGGCGCGCTTC 161
 Db 3 GTGGAGGCGCGCTTC 17
 RESULT 1135
 AAV48537
 ID AAV48537 standard; DNA; 18 BP.
 XX
 AC AAV48537;
 XX
 DT 15-OCT-1998 (first entry)
 XX
 DE p53 gene antisense oligonucleotide p53-T-2.
 XX
 KM p53; antisense oligonucleotide; modulate; gene expression; ss.
 XX
 OS Synthetic.
 OS Homo sapiens.
 XX
 PN EP856579-A1.
 XX
 PD 05-AUG-1998.
 XX
 PF 31-JAN-1997; 97EP-00101531.
 XX
 PR 31-JAN-1997; 97EP-00101531.
 XX
 PA (BIOG-) BIOGNOSTIK GES BIOMOLEKULARE DIAGNOSTIK.
 XX
 PI Schlingensiepen K, Brysch W;
 XX
 DR WPI; 1998-400910/35.
 XX
 PT Preparation of antisense oligo:nucleotide(s) which lack long runs of
 PT consecutive guanosine or inosine - and have specific ratio of residues
 PT able to form two or three hydrogen bonds, have greater activity and
 PT reduced toxicity, used therapeutically or to modulate growth of cells in
 PT culture.
 XX
 PS Example 2; Fig 4b; 286pp; English.
 XX
 CC AAV48485-564 represent antisense oligonucleotides directed against the
 CC p53 gene. Of these, only oligonucleotides AAV48485-517 resulted in
 CC effective downregulation of negative growth by p53 and increased cell
 CC proliferation, while AAV48518-64 had little effect. The oligonucleotides
 CC exemplify the invention. The specification describes oligonucleotides
 CC that contain 8-30 nucleotides, which contain at most 8 nucleotides that
 CC can each form three hydrogen bonds to cytosine; do not contain four
 CC consecutive nucleotides able to form three H-bonds each to four
 CC consecutive cytosines; do not contain two sequences of three consecutive
 CC nucleotides each able to form three H-bonds to three consecutive
 CC cytosines; and the ratio between residues able to form two H-bonds each
 CC (2R) or three such bonds (3R) is given by 2R/3R = 0.33-0.72. The
 CC oligonucleotides are used to modulate expression of genes, particularly
 CC the genes for p53, ErbB-2, jumb, jumb, TGF-beta 1 or beta 2 to control
 CC proliferation of primary cell cultures (e.g. bone marrow stem, liver or
 CC kidney cells, osteoclasts, osteoblasts and/or keratinocytes). The
 CC oligonucleotides can also be used to analyse function of proteins (by
 CC altering their expression or activity) and therapeutically, e.g. in cases

CC of cancer or (targeting TGF) for stimulating the immune system
 XX
 XX Sequence 18 BP; 3 A; 5 C; 7 G; 3 T; 0 U; 0 Other;
 SQ
 Query Match 2.8%; Score 11.8; DB 1; Length 18;
 Best Local Similarity 86.7%; Pred. No. 5.6e+02;
 Matches 13; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
 QY 52 ACTCAGAGGAGCTTC 66
 Db 4 ACTCAGAGGAGCTTC 18
 RESULT 1136
 AAV48422
 ID AAV48422 standard; DNA; 18 BP.
 XX
 AC AAV48422;
 XX
 DT 15-OCT-1998 (first entry)
 XX
 DE Transforming growth factor beta-1 antisense oligonucleotide N10.
 XX
 KM Transforming growth factor beta-1; TGF beta-1; antisense oligonucleotide;
 KM modulate; gene expression; ss.
 XX
 OS Synthetic.
 OS Homo sapiens.
 XX
 PN EP856579-A1.
 XX
 PD 05-AUG-1998.
 XX
 PF 31-JAN-1997; 97EP-00101531.
 XX
 PR 31-JAN-1997; 97EP-00101531.
 XX
 PA (BIOG-) BIOGNOSTIK GES BIOMOLEKULARE DIAGNOSTIK.
 XX
 PI Schlingensiepen K, Brysch W;
 XX
 DR WPI; 1998-400910/35.
 XX
 PT Preparation of antisense oligo:nucleotide(s) which lack long runs of
 PT consecutive guanosine or inosine - and have specific ratio of residues
 PT able to form two or three hydrogen bonds, have greater activity and
 PT reduced toxicity, used therapeutically or to modulate growth of cells in
 PT culture.
 XX
 PS Example 1; Fig 3a; 286pp; English.
 XX
 CC AAV48412-84 represent antisense oligonucleotides directed against
 CC transforming growth factor beta-1 (TGF beta-1). The oligonucleotides
 CC exemplify the invention. The specification describes oligonucleotides
 CC that contain 8-30 nucleotides, which contain at most 8 nucleotides that
 CC can each form three hydrogen bonds to cytosine; do not contain four
 CC consecutive nucleotides able to form three H-bonds each to four
 CC consecutive cytosines; do not contain two sequences of three consecutive
 CC nucleotides each able to form three H-bonds to three consecutive
 CC cytosines; and the ratio between residues able to form two H-bonds each
 CC (2R) or three such bonds (3R) is given by 2R/3R = 0.33-0.72. The
 CC oligonucleotides are used to modulate expression of genes, particularly
 CC the genes for p53, ErbB-2, jumb, jumb, TGF-beta 1 or beta 2 to control
 CC proliferation of primary cell cultures (e.g. bone marrow stem, liver or
 CC kidney cells, osteoclasts, osteoblasts and/or keratinocytes). The
 CC oligonucleotides can also be used to analyse function of proteins (by
 CC altering their expression or activity) and therapeutically, e.g. in cases
 CC of cancer or (targeting TGF) for stimulating the immune system
 XX
 SQ Sequence 18 BP; 1 A; 8 C; 8 G; 1 T; 0 U; 0 Other;
 Query Match 2.8%; Score 11.8; DB 1; Length 18;
 Best Local Similarity 86.7%; Pred. No. 5.6e+02;

Matches 13; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

OY 273 GAGCAGGCGGCGACC 287
 Db 1 GGGCGGCGGCGGCGACC 15

RESULT 1137
 AA217952
 ID AA217952 standard; DNA; 18 BP.

XX AA217952;

XX 11-OCT-1999 (first entry)

XX HOX gene specific RT-PCR primer.

XX Genetic proximity; gene expression; cell characterisation; homeobox gene;

KW genetic defect; reverse transcriptase polymerase chain reaction; RT-PCR;

KM kinase gene; protein phosphatase; P450; steroid receptor; cadherin;

KM primer; ss.

XX Synthetic.

OS Homo sapiens.

XX WO9934016-A2.

XX 08-JUL-1999.

XX 28-DEC-1998; 98WO-IL000625.

XX 29-DEC-1997; 97IL-00122793.

XX 16-OCT-1998; 98IL-00126627.

XX (GENE-) GENENNA LTD.

XX Vidler B;

XX WPI; 1999-419113/35.

XX Identifying and characterizing cells by comparing the pattern of gene

XX expression in a selected gene family.

XX Claim 4; Page 33; 102pp; English.

XX The invention provides a new method for identifying and characterizing

XX cells. The method for determining the genetic proximity of a first cell

XX and a second cell comprises: (a) obtaining the first cell and the second

XX cell; (b) determining in the first cell and the second cell the pattern

XX of expression of genes in a selected gene family; and (c) calculating a

XX genetic status, whether it carries a genetic defect, or whether it is

XX transformed. They can be used for detecting a selected genetic defect in

XX an individual, e.g. a fetus. They can also be used for determining the

XX effect of a selected treatment on a test cell. They can also be used for

XX obtaining cells capable of expressing an homeobox related desired

XX property. The method uses reverse transcriptase polymerase chain reaction

XX (RT-PCR) for determining the pattern of gene expression in a selected

XX gene family. Sequences AA217803-218342 represent primers that can be used

XX in the RT-PCR reactions to determine the pattern of gene expression. The

XX gene family can be selected from a set of homeobox genes, kinase genes,

XX protein phosphatase genes, P450 enzyme genes, steroid receptor

XX superfamily genes or cadherin superfamily genes

XX SQ Sequence 18 BP; 5 A; 4 C; 8 G; 1 T; 0 U; 0 Other;

XX Query Match 2.8%; Score 11.8; DB 1; Length 18;

XX Best Local Similarity 86.7%; Pred. No. 5.6e+02;

XX Matches 13; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

XX 82 GCGCAGTGGACATCA 96

Db 3 GCGCAGTGGACGCGCA 17

RESULT 1138
 AA228809/c
 ID AA228809 standard; DNA; 18 BP.

XX AA228809;

XX 01-FEB-2000 (first entry)

DE Primer CH for Mab Fab13B5 heavy chain gene PCR amplification.

KW Peptide ligand; affinity; p24; human immune deficiency virus-1; HIV-1;

KM light chain; heavy chain; Fab; monoclonal antibody; hypervariable region;

XX infection; primer; PCR; amplification; ss.

XX Synthetic.

OS Mus sp.

XX FR2777285-A1.

XX 15-OCT-1999.

XX 10-APR-1998; 98PR-00004876.

XX 10-APR-1998; 98PR-00004876.

XX (INMR) BIO MERIEUX.

XX Novelli RA, Monaco S, Piga N, Berthet C, Mallet F, Cusack S;

XX Chassaign V;

XX WPI; 1999-593428/51.

XX New peptide ligand specific for p24 of human immune deficiency virus

XX infection. Contains hypervariable regions of antibody 13B5, used for diagnosing HIV

XX infection.

XX Example 1; Page 12; 27pp; French.

XX The invention relates to a peptide ligand with specific affinity for the

XX p24 protein of human immune deficiency virus-1 (HIV-1) comprising at

XX least one peptide strand corresponding to the N-terminal region of the

XX CC light and/or heavy chain of the Fab fragment of monoclonal antibody 13B5

XX in which: (i) the light chain includes three hypervariable regions (HVR)

XX at amino acid (aa) positions 24-33, 49-55 and 86-95 of AA244175; and (ii)

XX the heavy chain includes three HVR at aa positions 26-35, 49-65 and 99-

XX CC 109 of AA244176. The primers AA228808-228809 were used to PCR amplify the

XX coding sequence for the heavy chain of Fab 13B5 (AA228805). The peptide

XX ligands are reagents for detecting p24 (by standard immunoassay) in

XX CC biological samples, specifically for diagnosis of HIV-1 infection or can

XX be used to treat HIV-1 infections

XX SQ Sequence 18 BP; 1 A; 6 C; 5 G; 6 T; 0 U; 0 Other;

XX Query Match 2.8%; Score 11.8; DB 1; Length 18;

XX Best Local Similarity 86.7%; Pred. No. 5.6e+02;

XX Matches 13; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

XX OY 280 GCGCAGCAAGAGTGG 294

XX Db 17 GCAGCAGCAAGAGTGG 3

XX RESULT 1139

XX AA240893/c

XX ID AA240893 standard; DNA; 18 BP.

XX AA240893;

XX 26-JAN-2000 (first entry)

DE	Human CD40 phosphorochioate antisense oligonucleotide SEQ ID NO:42.
XX	
KM	Identification; genetic target; gene modulation; human; probe;
KW	antisense oligonucleotide; phosphorochioate; PCR primer;
KX	nucleotide sequence-based technology; antisense drug discovery;
KM	target validation; ss.
XX	
OS	Synthetic.
OS	Homo sapiens.
XX	
PD	WO965101-A1.
XX	
PD	21-OCT-1999.
XX	
FP	13-APR-1999; 99MO-US008268.
XX	
PR	13-APR-1998; 98US-0081483P.
PR	28-APR-1998; 98US-0006763B.
XX	
PA	(ISIS-) ISIS PHARM INC.
XX	
P1	Cowsest LM, Baker BF, Mcneil J, Freier SM, Saemor HM, Brooks DG,
P1	Ohasi C, Wyatt JR, Borchers AH, Vickers TA;
XX	
DR	WPI; 1999-620446/53.
PT	Identifying compounds which modulate expression of nucleic acids, used to
PT	provide compounds having defined physical, chemical or bioactive
PT	properties, e.g. antisense activity.
PS	
PS	Example 8, Page 77, 264pp; English.
XX	
CC	A method has been developed of defining a set of compounds that modulate
CC	the expression of a target nucleic acid (tNA) sequence via binding of the
CC	compounds with the tNA sequence. The method comprises generating a
CC	library of virtual compounds in silico according to defined criteria, and
CC	evaluating in silico the binding of the virtual compounds with the tNA
CC	according to defined criteria. Also described are: (1) a method of
CC	defining a set of oligonucleotides (ONs) that modulate the expression of
CC	a tNA sequence via binding of the ONs with the tNA sequence comprising
CC	generating a library of virtual compounds in silico according to defined
CC	criteria, and evaluating in silico the binding of the virtual ONs with
CC	the tNA according to defined criteria; and (2) a method of defining a set
CC	of compounds that modulate the expression of a tNA sequence via binding
CC	of the compounds with the tNA. The methods can be used for the generation
CC	and identification of synthetic compounds having defined physical,
CC	chemical or bioactive properties. Information gathered from assays of
CC	such compounds is used to identify nucleic acid sequences that are
CC	tractable to a variety of nucleotide sequence-based technologies, e.g.,
CC	antisense drug discovery and target validation. AAZ40852 to AAZ41220, and
CC	AAV52701 to AAV52706, represent sequences used in the exemplification of
CC	the present invention
XX	
SO	Sequence 18 BP; 5 A; 4 C; 8 G; 1 T; 0 U; 0 Other;
QY	
Query Match	2.8%; Score 11.8; DB 1; Length 18;
Best Local Similarity	86.7%; Pred. No. 5.6e-02;
Matches 13; Conservative	0; Mismatches 2; Indels 0; Caps 0
Db	
128 CATGCTGGCCCCGCCT 142	
16 CATGCTGCCCGCCT 2	
RESULT 1140	
AAV73492	
AAV73492 standard; DNA; 18 BP.	
AAV73492;	
23-FEB-1999 (first entry)	
Human myeloid antigen-CD33 analogue GEN560D06 PCR primer F7.	

```

XX KM Myeloid antigen; CD33; detection; gene expression; analogue; GEN 560D06;
XX KM PCR primer; ss.
XX OS Synthetic.
XX OS Homo sapiens.
XX PN JP10286089-A.
XX PD 27-OCT-1998.
XX PF 15-APR-1997; 97JP-00096908.
XX PR 15-APR-1997; 97JP-00096908.
XX PA (SAKA ) OTSUKA PHARM CO LTD.
XX DR WPI; 1999-063481/06.
XX PT New human rab7GTP-combined analogous protein gene - useful for detection
XX PT of its expression in tissues.
XX PS Example 2; Page 10; 35pp; Japanese.
XX CC AAV73492 and AAV73493 are PCR primers used in the amplification of a
XX CC novel human myeloid antigen-CD33 connecting protein analogue, GEN 560D06.
XX CC The gene is useful for the detection of gene expression in various
XX CC tissues
XX SQ Sequence 18 BP; 1 A; 6 C; 6 G; 5 T; 0 U; 0 Other;
CY 241 GCTGCTCCCGGCGCT 255
DB 1 GCTGCTCCAGGCGCT 15

RESULT 1141
AAK38029
ID AAK38029 standard; DNA; 18 BP.
XX AC AAK38029;
XX DT 04-JUN-1999 (first entry)
XX DE HLA-A untranslated region primer SEQ ID NO:185.
XX KM Human; histocompatibility locus antigen; HLA; determination; allele;
XX KM HLA-B typing; PCR; HLA class I; cis/trans linkage resolution; ss.
XX OS Synthetic.
XX OS Homo sapiens.
XX PN WO9907883-A1.
XX PD 18-FEB-1999.
XX PF 11-AUG-1998; 98WO-CA000768.
XX PR 11-AUG-1997; 97US-00909290.
XX PA (VISI-) VISIBLE GENETICS INC.
XX PA (BLAS/) BLASZKYK R H.
XX PI Blaszyk RH, Leushner J;
XX DR WPI; 1999-167446/14.
XX PT Determination of HLA class I group type of a subject - using group
XX PT specific untranslated region primer pair.

```

XX Disclosure; Page 18; 195pp; English.

XX The present invention describes a method using novel primers involving

XX the PCR-based determination of histocompatibility locus antigen B (HLA-B)

XX Class I group type. Determining the HLA-B Class I group type of a subject

XX comprises: (i) combining a group-specific untranslated region primer pair

XX with a target DNA sample from the subject under conditions such that

XX determining whether a nucleic acid product is produced by the

XX amplification; where the ability of the primer pair to produce a nucleic

XX acid product is associated with a particular HLA group type. The method

XX can be used for HLA-B typing. In the method, the initial group specific

XX amplification allows a PCR based separation of haplotypes in 95% of

XX patient samples. It permits the resolution of cis/trans linkages of

XX heterozygote sequencing results which cannot be achieved with other

XX protocols. AAX37845 to AAX38286 represent DNA sequence used in the

XX exemplification of the present invention

XX

SQ Sequence 18 BP; 2 A; 5 C; 10 G; 1 T; 0 U; 0 Other;

QY Query Match 2.8%; Score 11.8; DB 1; Length 18;

Best Local Similarity 86.7%; Pred. No. 5.6e+02;

Matches 13; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

138 CGCCTGCGCGCTGGAG 152

1 CGCCTGCGCGCGG 15

Db

RESULT 1142

AAX38246

ID AAX38246 standard; DNA; 18 BP.

XX AAX38246;

AC

XX

XX 04-JUN-1999 (first entry)

DT

XX

XX Histocompatibility locus antigen PCR primer SEQ ID NO:402.

DE

XX

XX Human; histocompatibility locus antigen; HLA; determination; allele;

KM HLA-B typing; PCR; HLA class I; cis/trans linkage resolution; ss.

KM

XX

OS Synthetic.

OS

XX Homo sapiens.

XX

XX MO9907883-A1.

XX

XX 18-FEB-1999.

PD

XX

XX 11-AUG-1998; 98WO-CA000768.

PF

XX

XX 11-AUG-1997; 97US-00909290.

PR

XX

XX (VISI-) VISIBLE GENETICS INC.

PA

XX (BLAS/) BLASCTYK R H.

XX

XX Blaczyk RH, Leushner J;

PI

XX

XX WPI; 1999-167446/14.

DR

XX

XX Determination of HLA class I group type of a subject - using group

PT specific untranslated region primer pair.

XX

XX Example; Page 28; 195pp; English.

PS

XX

XX The present invention describes a method using novel primers involving

CC the PCR-based determination of histocompatibility locus antigen B (HLA-B)

CC Class I group type. Determining the HLA-B Class I group type of a subject

CC comprises: (i) combining a group-specific untranslated region primer pair

CC with a target DNA sample from the subject under conditions such that

CC primer-based amplification of the target DNA may occur; and (ii)

CC determining whether a nucleic acid product is produced by the

CC amplification; where the ability of the primer pair to produce a nucleic

CC acid product is associated with a particular HLA group type. The method

CC can be used for HLA-B typing. In the method, the initial group specific

CC amplification allows a PCR based separation of haplotypes in 95% of

CC patient samples. It permits the resolution of cis/trans linkages of

CC heterozygote sequencing results which cannot be achieved with other

CC protocols. AAX37845 to AAX38286 represent DNA sequence used in the

CC exemplification of the present invention

CC

SQ Sequence 18 BP; 3 A; 6 C; 6 G; 3 T; 0 U; 0 Other;

QY Query Match 2.8%; Score 11.8; DB 1; Length 18;

Best Local Similarity 86.7%; Pred. No. 5.6e+02;

Matches 13; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

22 TGACCGAGACTGGG 36

2 TGACCGAGACTGGG 16

Db

RESULT 1143

AAZ30566

ID AAZ30566 standard; DNA; 18 BP.

XX AAZ30566;

AC

XX

XX 18-JAN-2000 (first entry)

DT

XX

XX Human integrin alpha 4 gene antisense oligonucleotide ISIS #24449.

DE

XX

XX Human; integrin; antisense; oligonucleotide; inhibition; expression;

KM very late antigen; CD49d; CD29; cell surface; leucocyte; adhesion;

KM vascular endothelial cell; vascular endothelium; migration; inflammation;

KM atherosclerosis; allergy; asthma; rheumatoid arthritis; tumor;

KM metastasis; circulatory system; autoimmune disease; Grave's disease;

KM Hashimoto's thyroiditis; encephalomyelitis; multiple sclerosis; ss.

KM

XX

OS Synthetic.

OS

XX Homo sapiens.

XX

XX US5968826-A.

PN

XX

XX 19-OCT-1999.

PD

XX

XX 05-OCT-1998; 98US-00166203.

PF

XX

XX 05-OCT-1998; 98US-00166203.

PR

XX

XX (ISIS-) ISIS PHARM INC.

PA

XX Bennett CF, Cowseert LM, Condon TP;

PI

XX

XX WPI; 1999-590416/50.

DR

XX

XX Antisense inhibition of integrin alpha4 expression useful for treating

PT inflammatory diseases such as atherosclerosis, allergies, asthma and

PT arthritis.

XX

XX Example 8; Col 25; 40pp; English.

PS

XX

XX The invention relates to the generation of antisense oligonucleotides

CC targeted to the integrin alpha4 gene (human sequence AAZ30555) which are

CC used for inhibiting expression of the integrin alpha4 mRNA or protein.

CC The oligonucleotides AAZ30556-230594 are used to inhibit human integrin

CC alpha4 protein expression. Integrin alpha4 is a component of Very Late

CC Antigen (VLA)-4 (also called alpha4beta1 and CD49/CD29). VLA-4 is

CC expressed on the cell surfaces of leucocytes and vascular endothelial

CC cells and mediates the adhesion of leucocytes to the vascular endothelium

CC prior to migration into the surrounding tissues. This migration is an

CC essential step in inflammation and hence VLA-4 (and consequently integrin

CC alpha4) is a potential therapeutic target for treating inflammatory

CC diseases and the damaging effects of excessive inflammation. These

CC disorders include atherosclerosis, allergies, asthma, rheumatoid

CC arthritis and tumor cell metastasis (VLA-4 is involved in migration of
 CC the tumor cells through the extracellular matrix into the circulatory
 CC system). VLA-4 is also involved in a number of autoimmune diseases such
 CC as Grave's disease, Hashimoto's thyroiditis, encephalomyelitis (EAE),
 CC multiple sclerosis. VLA-4 may also be involved in promoting adhesion
 CC (i.e. retention) of hematopoietic stem cells in bone-marrow and in
 CC allograft rejection

CC
 CC Sequence 18 BP; 2 A; 5 C; 7 G; 4 T; 0 U; 0 Other;

SO
 Query Match 2.8%; Score 11.8; DB 1; Length 18;
 Best Local Similarity 86.7%; Pred. No. 5.6e+02;
 Matches 13; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 98 CACGCTGACCGGCA 112
 DB 2 CACGCTGACCGGCA 16

RESULT 1144
 ID AA57864 standard; DNA; 18 BP.
 AC AA57864;
 XX
 DT 11-OCT-2000 (first entry)
 XX
 DE Mutant effector oligonucleotide, mut.3.
 XX
 KM Ribozyme; catalytic RNA; analyte detection; effector molecule;
 KM nucleic acid substrate; in vitro selection; ribozyme ligase;
 KM conformation dependent activity; allosteric activation; mutant; ss.
 OS
 XX Synthetic.
 FH Key Location/Qualifiers
 FT misc_binding 1..18
 FT /tag= a
 FT /bound_molecule= "Bases 120-136 of ribosome ligase L1
 (AA57859)"
 PN MO200024931-A2.
 PD 04-MAY-2000.
 XX
 PF 22-OCT-1999; 99WO-11000557.
 XX
 PR 23-OCT-1998; 98IL-00126731.
 XX
 PA (INTE-) INTELLIGENT LMD.
 PI Nathan A, Ellington A;
 XX
 DR WPI; 2000-350763/30.
 XX
 PT Detecting an analyte in a sample comprises providing nucleic acid
 PT sequence which is catalytically active in presence of analyte, contacting
 PT catalytic nucleic acid with substrate and amplifying catalytic product.
 XX
 PS Example 3, Page 17; 36pp; English.
 XX
 CC The invention relates to a method of detecting an analyte in a sample.
 CC The method comprises providing a nucleic acid sequence which is initially
 CC catalytically inactive, but which becomes catalytically active in the
 CC presence of an analyte (the effector); providing a nucleic acid substrate
 CC for the catalytic activity of the nucleic acid sequence; and contacting
 CC the nucleic acid sequence and the substrate with the sample under
 CC conditions allowing catalytic activity of nucleic acid sequences. The
 CC catalytic nucleic acid sequence will be able to convert the nucleic acid
 CC substrate into a nucleic acid product only if the analyte of interest is
 CC present. The nucleic acid catalytic product is then amplified, and a
 CC significant increase in the amount of product indicates the presence of
 CC the analyte in the sample. The method is useful for the qualitative or

CC quantitative determination of an analyte in a sample in diagnostic
 CC assays. The invention describes the in vitro selection of a ribozyme
 CC ligase (L1; AA57859, AA57860) which is catalytically active only in the
 CC presence of an oligonucleotide effector (AA57854). The L1 ribozyme
 CC ligase was selected from a pool of RNA molecules comprising a central
 CC constant sequence region 90 nucleotides in length flanked on both sides by
 CC of the effector. selection was performed using one of the tagged
 CC substrate molecules AA57855-AA57857. RNAs with ligase activity (i.e.,
 CC those which have become ligated to the substrate molecule) were reverse
 CC transcribed using the effector oligo, and then PCR amplified using the
 CC effector and a DNA primer identical in sequence to the substrate used for
 CC the selection. A ribozyme ligase, L1, was selected via this procedure. L1
 CC can only adopt its active conformation (AA57859) in the presence of the
 CC effector oligo (analyte). In the absence of the effector, L1 adopts an
 CC inactive conformation (AA57860). Sequences AA57863-AA57867 represent a
 CC series of mutant effector oligonucleotide used with wild-type L1 ribozyme
 CC (AA57859) in an exemplification of the invention

CC
 CC Sequence 18 BP; 5 A; 6 C; 5 G; 2 T; 0 U; 0 Other;

SO
 Query Match 2.8%; Score 11.8; DB 1; Length 18;
 Best Local Similarity 86.7%; Pred. No. 5.6e+02;
 Matches 13; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 86 AGTGACATCACCAC 100
 DB 4 ACTGACATCACCAC 18

RESULT 1145
 AA247726/C
 ID AA247726 standard; DNA; 18 BP.
 AC AA247726;
 XX
 DT 02-MAR-2000 (first entry)
 XX
 DE Human CD40 antisense oligonucleotide SEQ ID NO:42.
 XX
 KM Human; CD40; antisense oligonucleotide; phosphorothioate; modulation;
 KM expression; immune disease; inflammatory disease; immunomodulatory;
 KM anti-inflammatory; anti-arthritis; anti-asthmatic; antiproliferative;
 KM anticancer; immuno-suppressive; anti-psoriasis; allograft rejection;
 KM hyperproliferative disease; autoimmune disease; rheumatoid arthritis;
 KM inflammatory bowel disease; asthma; psoriasis; cancer; tumour; ss.
 OS
 XX Synthetic.
 OS Homo sapiens.
 XX
 PN WO9557320-A1.
 PD 11-NOV-1999.
 XX
 PF 22-APR-1999; 99WO-US008765.
 XX
 PR 01-MAY-1998; 98US-00071433.
 XX
 PA (ISIS-) ISIS PHARM INC.
 PI Bennett CF, Cowseart LM;
 XX
 DR WPI; 2000-062158/05.
 XX
 PT Antisense molecules directed against nucleic acid encoding human CD40,
 PT for treating e.g. immune, inflammatory or hyperproliferative diseases.
 XX
 PS Example 9, Page 44; 102pp; English.
 XX
 CC AA247685 to AA247768 represent phosphorothioate antisense
 CC oligonucleotides targeted to human CD40, which can be used to inhibit the
 CC expression of human CD40. CD40 is involved in lymphocyte activation,
 CC tumour growth and/or angiogenesis. Inhibition of CD40 is used to treat or

CC prevent immune-associated diseases (specifically guest vs. host disease,
CC allograft rejection or autoimmune diseases); inflammation (specifically
CC acthina, rheumatoid arthritis, allograft rejection, inflammatory bowel
CC disease or psoriasis) or hyperproliferation (specifically cancer and
CC tumours). The antisense oligonucleotides are also useful as diagnostic
CC and research reagents. AA247769 represents the human CD40 nucleotide
CC sequence. AA247770 to AA247772 represent human CD40 forward and reverse
CC PCR primers, and a human CD40 PCR probe, respectively. AA247773 to
CC AA247775 represent other PCR primers and a probe used in the
CC exemplification of the present invention

XX Sequence 18 BP; 5 A; 4 C; 8 G; 1 T; 0 U; 0 Other;

Query Match 2.8%; Score 11.8; DB 1; Length 18;
Best Local Similarity 86.7%; Pred. No. 5.6e+02;
Matches 13; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 128 CATGCTGCGCCGCT 142

Db 16 CATGCTGCGCCGCT 2

RESULT 1146
AA298706/c
ID AA298706 standard; DNA; 18 BP.

XX AA298706;

DT 20-JUN-2000 (first entry)

DE Collagen promoter inhibitory oligonucleotide Oligo 147 P.

XX Collagen; inhibit; myocardial fibrosis; hypertensive heart disease;
XX atherosclerosis; restenosis; liver cirrhosis; lung fibrosis; burn injury;
XX peritoneal fibrosis; skin fibrosis; scleroderma; hypertrophic scar; ss.

XX Rattus sp.

XX WO200008213-A1.

XX 17-FEB-2000.

XX 06-AUG-1999; 99WO-US017824.

XX 07-AUG-1998; 98US-00130888.

XX (GUNT/) GUNTAKA R V.

XX Guntaka RV, Weber KT, Kovacs A, Kandala J;

XX WPI, 2000-205739/18.

XX Inhibitors of collagen gene useful for treating fibrosis associated with
XX atherosclerosis, restenosis, liver cirrhosis, lung and skin fibrosis,
XX comprises oligomers capable of inhibiting collagen gene.

XX Claim 19; Fig 8; 77pp; English.

XX This sequence represents an oligomer which is capable of inhibiting the
XX expression of the collagen gene. The oligomer is capable of binding to
XX the promoter region of the collagen gene. Collagen is a family of fibrous
XX proteins, and is the major element of skin, bone, tendon, cartilage,
XX blood vessels and teeth. The oligomers are useful for inhibiting
XX expression of the collagen gene, comprising inserting the oligomers into
XX a cell and causing an intracellular reaction to inhibit the gene
XX expression. The collagen inhibitory oligomers of the invention are useful
XX for treating pathological fibrosis associated with myocardial fibrosis in
XX hypertensive heart disease, atherosclerosis, restenosis, liver cirrhosis,
XX lung fibrosis, peritoneal fibrosis and skin fibrosis found in
XX scleroderma, hypertrophic scars and burn injury

XX Sequence 18 BP; 7 A; 0 C; 11 G; 0 T; 0 U; 0 Other;

Query Match 2.8%; Score 11.8; DB 1; Length 18;
Best Local Similarity 86.7%; Pred. No. 5.6e+02;
Matches 13; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 362 CTTCCTCACTTCTCT 376

Db 18 CCTCCTCCCTTCTCT 4

RESULT 1147
AA298715/c
ID AA298715 standard; DNA; 18 BP.

XX AA298715;

DT 20-JUN-2000 (first entry)

DE Collagen promoter inhibitory oligonucleotide Oligo Col 164 AFS.

XX Collagen; inhibit; myocardial fibrosis; hypertensive heart disease;
XX atherosclerosis; restenosis; liver cirrhosis; lung fibrosis; burn injury;
XX peritoneal fibrosis; skin fibrosis; scleroderma; hypertrophic scar; ss.

XX Rattus sp.

XX WO200008213-A1.

XX 17-FEB-2000.

XX 06-AUG-1999; 99WO-US017824.

XX 07-AUG-1998; 98US-00130888.

XX (GUNT/) GUNTAKA R V.

XX Guntaka RV, Weber KT, Kovacs A, Kandala J;

XX WPI, 2000-205739/18.

XX Inhibitors of collagen gene useful for treating fibrosis associated with
XX atherosclerosis, restenosis, liver cirrhosis, lung and skin fibrosis,
XX comprises oligomers capable of inhibiting collagen gene.

XX Example 4; Fig 8; 77pp; English.

XX This sequence represents an oligomer which is capable of inhibiting the
XX expression of the collagen gene. The oligomer is capable of binding to
XX the promoter region of the collagen gene. Collagen is a family of fibrous
XX proteins, and is the major element of skin, bone, tendon, cartilage,
XX blood vessels and teeth. The oligomers are useful for inhibiting
XX expression of the collagen gene, comprising inserting the oligomers into
XX a cell and causing an intracellular reaction to inhibit the gene
XX expression. The collagen inhibitory oligomers of the invention are useful
XX for treating pathological fibrosis associated with myocardial fibrosis in
XX hypertensive heart disease, atherosclerosis, restenosis, liver cirrhosis,
XX lung fibrosis, peritoneal fibrosis and skin fibrosis found in
XX scleroderma, hypertrophic scars and burn injury

XX Sequence 18 BP; 7 A; 0 C; 11 G; 0 T; 0 U; 0 Other;

Query Match 2.8%; Score 11.8; DB 1; Length 18;
Best Local Similarity 86.7%; Pred. No. 5.6e+02;
Matches 13; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 362 CTTCCTCACTTCTCT 376

Db 18 CCTCCTCCCTTCTCT 4

RESULT 1148
AA298708/c
ID AA298708 standard; DNA; 18 BP.

XX AA298708;

DT 20-JUN-2000 (first entry)

DE Collagen promoter inhibitory oligonucleotide Oligo Col 164 AFS.

XX Collagen; inhibit; myocardial fibrosis; hypertensive heart disease;
XX atherosclerosis; restenosis; liver cirrhosis; lung fibrosis; burn injury;
XX peritoneal fibrosis; skin fibrosis; scleroderma; hypertrophic scar; ss.

XX Rattus sp.

XX WO200008213-A1.

XX 17-FEB-2000.

XX 06-AUG-1999; 99WO-US017824.

XX 07-AUG-1998; 98US-00130888.

XX (GUNT/) GUNTAKA R V.

XX Guntaka RV, Weber KT, Kovacs A, Kandala J;

XX WPI, 2000-205739/18.

XX Inhibitors of collagen gene useful for treating fibrosis associated with
XX atherosclerosis, restenosis, liver cirrhosis, lung and skin fibrosis,
XX comprises oligomers capable of inhibiting collagen gene.

XX Example 4; Fig 8; 77pp; English.

XX This sequence represents an oligomer which is capable of inhibiting the
XX expression of the collagen gene. The oligomer is capable of binding to
XX the promoter region of the collagen gene. Collagen is a family of fibrous
XX proteins, and is the major element of skin, bone, tendon, cartilage,
XX blood vessels and teeth. The oligomers are useful for inhibiting
XX expression of the collagen gene, comprising inserting the oligomers into
XX a cell and causing an intracellular reaction to inhibit the gene
XX expression. The collagen inhibitory oligomers of the invention are useful
XX for treating pathological fibrosis associated with myocardial fibrosis in
XX hypertensive heart disease, atherosclerosis, restenosis, liver cirrhosis,
XX lung fibrosis, peritoneal fibrosis and skin fibrosis found in
XX scleroderma, hypertrophic scars and burn injury

XX Sequence 18 BP; 7 A; 0 C; 11 G; 0 T; 0 U; 0 Other;

AC AA298708;
 XX
 DT 20-JUN-2000 (first entry)
 XX
 DE Collagen promoter inhibitory oligonucleotide Oligo Col 164 APS.
 XX
 KW Collagen; inhibit; myocardial fibrosis; hypertensive heart disease;
 XX atherosclerosis; restenosis; liver cirrhosis; lung fibrosis; burn injury;
 XX peritoneal fibrosis; skin fibrosis; scleroderma; hypertrophic scar; ss.
 XX
 OS Rattus sp.
 XX
 PN W0200008213-A1.
 XX
 PD 17-FEB-2000.
 XX
 PF 06-AUG-1999; 99MO-US017824.
 XX
 PR 07-AUG-1998; 98US-00130888.
 XX
 PA (GUNT/) GUNTAKA R V.
 XX
 PI Gunataka RV, Weber KT, Kovacs A, Kandata J;
 XX WPI, 2000-205739/18.
 XX
 DR
 XX
 PT Inhibitors of collagen gene useful for treating fibrosis associated with
 PT atherosclerosis, restenosis, liver cirrhosis, lung and skin fibrosis,
 PT comprises oligomers capable of inhibiting collagen gene.
 XX
 PS Claim 19; Fig 8; 77pp; English.
 XX
 CC This sequence represents an oligomer which is capable of inhibiting the
 CC expression of the collagen gene. The oligomer is capable of binding to
 CC the promoter region of the collagen gene. Collagen is a family of fibrous
 CC proteins, and is the major element of skin, bone, tendon, cartilage,
 CC blood vessels and teeth. The oligomers are useful for inhibiting
 CC expression of the collagen gene, comprising inserting the oligomers into
 CC a cell and causing an intracellular reaction to inhibit the gene
 CC expression. The collagen inhibitory oligomers of the invention are useful
 CC for treating pathological fibrosis associated with myocardial fibrosis in
 CC hypertensive heart disease, atherosclerosis, restenosis, liver cirrhosis,
 CC lung fibrosis, peritoneal fibrosis and skin fibrosis found in
 CC scleroderma, hypertrophic scars and burn injury
 CC
 SO Sequence 18 BP; 7 A; 0 C; 11 G; 0 T; 0 U; 0 Other;
 Query Match 2.8%; Score 11.8; DB 1; Length 18;
 Best Local Similarity 86.7%; Pred. NO. 5.6e+02;
 Matches 13; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
 QY 362 CTTCTCCTCCTTCTCT 376
 DB 18 CTTCTCCTCCTTCTCT 4
 RESULT 1149
 AA257673/c
 ID AA257673 standard; DNA; 18 BP.
 XX
 AC AA257673;
 XX
 DT 05-APR-2000 (first entry)
 XX
 DE Human G-alpha-12 antisense inhibitor ISIS# 20661.
 XX
 KW G-alpha-12 inhibitor; antisense compound; cell differentiation; cancer;
 KW cell growth; metastatic growth; ss; ISIS# 20661.
 XX
 OS Homo sapiens.
 XX
 PN US5998206-A.
 XX

PD 07-DEC-1999.
 XX
 PF 23-FEB-1999; 99US-00256496.
 XX
 PR 23-FEB-1999; 99US-00256496.
 XX
 PA (ISIS-) ISIS PHARM INC.
 XX
 PI Cowser LM;
 XX WPI, 2000-095920/08.
 XX
 DR
 XX
 PT Antisense inhibition of human G-alpha-12 expression.
 XX
 PS Example 15; Col 38; 36pp; English.
 XX
 CC This is a human G-alpha-12 antisense nucleotide sequence. G-alpha-12 is a
 CC member of the G12/13 subfamily of G-proteins. The primary function of G-
 CC alpha-12 is in cell differentiation and growth. The invention relates to
 CC antisense compounds which are 8-30 nucleotides long (see AA257668-
 CC 257746). The antisense molecules are targeted to the human G-alpha-12
 CC nucleic acid molecule, and inhibit the expression of G-alpha-12. The
 CC molecules preferably have a modified internucleotide linkage, and at
 CC least one modified sugar moiety. The compounds target different regions
 CC of the human G-alpha-12 RNA. The expression of human G-alpha 12 is
 CC inhibited by contacting human cells or tissues in vitro with the
 CC antisense molecules. The oligonucleotides are used in modulating the
 CC function of nucleic acid molecules encoding G-alpha-12, ultimately
 CC modulating the amount of G-alpha-12 produced. The antisense compounds can
 CC be utilized for diagnostics, therapeutics, prophylaxis and as research
 CC agents and kits. They may be useful in the treatment of cancer, and
 CC metastatic growth
 CC
 SO Sequence 18 BP; 4 A; 6 C; 5 G; 3 T; 0 U; 0 Other;
 Query Match 2.8%; Score 11.8; DB 1; Length 18;
 Best Local Similarity 86.7%; Pred. NO. 5.6e+02;
 Matches 13; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
 QY 291 CTGGGAAAGACCTG 305
 DB 16 CTGGGAAAGATCTG 2
 RESULT 1150
 AA291392/c
 ID AA291392 standard; DNA; 18 BP.
 XX
 AC AA291392;
 XX
 DT 22-MAY-2000 (first entry)
 XX
 DE Human PTEN phosphorochioate antisense oligonucleotide #29558.
 XX
 KW Human; PTEN; MMAC1; TEP1; phosphorochioate; antisense oligonucleotide;
 KW inhibition; protein phosphatase; tumour diagnosis; inflammation;
 KW anticancer; anti-inflammatory; anti-infective; infection; ss.
 XX
 OS Homo sapiens.
 XX
 FH Key Location/Qualifiers
 FT modified_base 1..18
 FT /*tag= a
 FT /note= "phosphorochioate linkages"
 XX
 PN US6020199-A.
 XX
 PD 01-FEB-2000.
 XX
 PF 21-JUL-1999; 99US-00358381.
 XX
 PR 21-JUL-1999; 99US-00358381.
 XX

PA (ISIS-) ISIS PHARM INC.
 XX
 PI Monia BP, Cowsett LM;
 XX
 DR WPI; 2000-181363/16.
 XX
 PT New antisense compounds useful for treating, preventing or diagnosing
 PT e.g. tumors or inflammation, are targeted to the human dual specificity
 PT protein phosphatase (PTEN) sequence.
 XX
 PS Example 15; Col 41; 32pp; English.
 XX
 CC The present invention describes phosphorothioate antisense
 CC oligonucleotides that are targeted to the 3'-untranslated region (UTR) of
 CC the sequence encoding a human dual specificity protein phosphatase
 CC designated PTEN (also known as WWAC1 and TEP1), and hybridise
 CC specifically to the human PTEN nucleotide sequence given in AA293461. The
 CC antisense oligonucleotides have anticancer, anti-inflammatory and anti-
 CC infective activities. The phosphorothioate antisense oligonucleotides can
 CC be used for diagnosis, treatment and prevention of PTEN-related diseases,
 CC e.g. infections, inflammation and tumours. The present sequence
 CC represents a phosphorothioate antisense oligonucleotide for human PTEN,
 CC from the present invention
 XX
 SQ Sequence 18 BP; 6 A; 3 C; 2 G; 7 T; 0 U; 0 Other;
 XX
 Query Match 2.8%; Score 11.8; DB 1; Length 18;
 Best Local Similarity 86.7%; Pred. No. 5.6e+02;
 Matches 13; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
 XX
 QY 406 TCTACGTGATCGAGA 420
 DB 18 TCTATGTGATCAAGA 4
 XX
 RESULT 1151
 AA293459
 ID AA293459 standard; DNA; 18 BP.
 XX
 AC AA293459;
 XX
 DT 24-JUL-2000 (first entry)
 XX
 DE TRADD antisense oligonucleotide.
 XX
 KW TRADD; TNF; tumour necrosis factor; NF-kappa-B; apoptosis;
 KW programmed cell death; antisense; inhibition; treatment; therapy;
 KW septic shock; inflammation; cancer; antiinflammatory; human; ss.
 XX
 OS Synthetic.
 XX
 FH Key Location/Qualifiers
 FT misc_binding complement(1..18)
 FT /*tag= a
 FT /note= "Complementary to bases 389-372 of the human TRADD
 FT sequence described in GENBSEQ record AA293431"
 FT
 XX
 XX WO200012527-A1.
 XX
 XX 09-MAR-2000.
 XX
 XX 25-AUG-1999; 99WO-US019614.
 XX
 XX 28-AUG-1998; 98US-00143212.
 XX
 XX (ISIS-) ISIS PHARM INC.
 XX
 XX Monia BP, Cowsett LM;
 XX
 XX WPI; 2000-237846/20.
 XX
 PT New antisense compounds that limit the expression of human TRADD protein,
 PT useful in the treatment and diagnosis of cancer, inflammation and septic

PT shock.
 XX
 PS Claim 3; Page 51; 85pp; English.
 XX
 CC The intracellular protein TRADD has been identified as a critical link
 CC between tumour necrosis factor (TNF) receptor binding and downstream
 CC activation of NF-kappa-B. Overexpression of native TRADD activates NF-
 CC kappa-B in the absence of TNF and dominant negative mutants of TRADD
 CC block TNF-induced NF-kappa-B activation. A second effect of TNF in many
 CC cell types is the induction of apoptosis (programmed cell death). TRADD
 CC overexpression has been shown to mimic TNF induction of apoptosis as
 CC well. Data indicates that TRADD and other downstream effector proteins
 CC are the rate limiting step of TNF action and would therefore serve as the
 CC most efficient targets for inhibition of TNF-induced events. Antisense
 CC oligonucleotides capable of inhibiting TRADD function may therefore be
 CC useful in a number of therapeutic, diagnostic and research applications.
 CC Inhibiting expression of TRADD by contacting human cells or tissues with
 CC the antisense compound may be used to treat a disease or condition
 CC associated with TRADD expression, for example, septic shock,
 CC inflammation, or cancer. TRADD antisense oligonucleotides of varying
 CC inhibitory capabilities are listed in GENBSEQ records AA293438-293517.
 CC The antisense oligonucleotides exhibit enhanced inhibitory capabilities
 CC when they have 2'-MOE wings and a deoxy gap
 XX
 SQ Sequence 18 BP; 3 A; 5 C; 8 G; 2 T; 0 U; 0 Other;
 XX
 Query Match 2.8%; Score 11.8; DB 1; Length 18;
 Best Local Similarity 86.7%; Pred. No. 5.6e+02;
 Matches 13; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
 XX
 QY 313 GGCACCGCGTCTG 327
 DB 4 GGCACCGAGTCTG 18
 XX
 RESULT 1152
 AA293461/C
 ID AA293461 standard; DNA; 18 BP.
 XX
 AC AA293461;
 XX
 DT 24-JUL-2000 (first entry)
 XX
 DE TRADD antisense oligonucleotide.
 XX
 KW TRADD; TNF; tumour necrosis factor; NF-kappa-B; apoptosis;
 KW programmed cell death; antisense; inhibition; treatment; therapy;
 KW septic shock; inflammation; cancer; antiinflammatory; human; ss.
 XX
 OS Synthetic.
 XX
 FH Key Location/Qualifiers
 FT misc_binding complement(1..18)
 FT /*tag= a
 FT /note= "Complementary to bases 401-384 of the human TRADD
 FT sequence described in GENBSEQ record AA293431"
 FT
 XX
 XX WO200012527-A1.
 XX
 XX 09-MAR-2000.
 XX
 XX 25-AUG-1999; 99WO-US019614.
 XX
 XX 28-AUG-1998; 98US-00143212.
 XX
 XX (ISIS-) ISIS PHARM INC.
 XX
 XX Monia BP, Cowsett LM;
 XX
 XX WPI; 2000-237846/20.
 XX
 PT New antisense compounds that limit the expression of human TRADD protein,
 PT useful in the treatment and diagnosis of cancer, inflammation and septic

PT shock.
 XX Claim 3, Page 52, 85pp, English.
 PS
 CC The intracellular protein TRADD has been identified as a critical link
 CC between tumour necrosis factor (TNF) receptor binding and downstream
 CC activation of NF-kappa-B. Overexpression of native TRADD activates NF-
 CC kappa-B in the absence of TNF and dominant negative mutants of TRADD
 CC block TNF-induced NF-kappa-B activation. A second effect of TNF in many
 CC cell types is the induction of apoptosis (programmed cell death). TRADD
 CC overexpression has been shown to mimic TNF induction of apoptosis as
 CC well. Data indicates that TRADD and other downstream effector proteins
 CC are the rate limiting step of TNF action and would therefore serve as the
 CC most efficient targets for inhibition of TNF-induced events. Antisense
 CC oligonucleotides capable of inhibiting TRADD function may therefore be
 CC useful in a number of therapeutic, diagnostic and research applications.
 CC Inhibiting expression of TRADD by contacting human cells or tissues with
 CC the antisense compound may be used to treat a disease or condition
 CC associated with TRADD expression, for example, septic shock,
 CC inflammation, or cancer. TRADD antisense oligonucleotides of varying
 CC inhibitory capabilities are listed in GENESQ records AA29338-293517.
 CC The antisense oligonucleotides exhibit enhanced inhibitory capabilities
 CC when they have 2'-MOE wings and a deoxy gap
 CC
 SQ Sequence 18 BP; 3 A; 6 C; 6 G; 3 T; 0 U; 0 Other;
 QY
 Query Match 2.8%; Score 11.8; DB 1; Length 18;
 Best Local Similarity 86.7%; Pred. No. 5.6e+02;
 Matches 13; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
 Db 262 CGCTGCACCTGGAGC 276
 |||||
 16 CGCTGCACCTGGAGC 2
 RESULT 1153
 AAC70705
 ID AAC70705 standard; DNA; 18 BP.
 XX
 AC AAC70705;
 XX
 DT 09-FEB-2001 (first entry)
 XX
 DE Single nucleotide polymorphism PCR primer #357.
 XX
 KW Single nucleotide polymorphism; SNP; human; genetic disease;
 KW disease susceptibility; cardiovascular system; endocrine system;
 KW neurological system; forensic testing; paternity testing; PCR primer; ss.
 XX
 OS Homo sapiens.
 XX
 PN WO200058519-A2.
 XX
 PD 05-OCT-2000.
 XX
 PF 30-MAR-2000; 2000WO-US008440.
 XX
 PR 31-MAR-1999; 99US-0127248P.
 XX
 PA (WHED) WHITEHEAD INST BIOMEDICAL RES.
 PA (AFFY-) AFFYMETRIX INC.
 XX
 PI Altmuler D, Cargill M, Daley GQ, Ireland JS, Lander ES;
 PI Lipshutz RJ, Patil N, Sklar P;
 XX
 DR WPI; 2000-611722/58.
 XX
 PT Nucleic acid selected from one of 106 genes comprising single nucleotide
 PT polymorphisms, allele-specific oligonucleotides to the genes are useful
 PT for phenotypic correlations, forensics, paternity testing, medicine and
 PT genetic analysis.
 XX
 PS Claim 8; Fig 5; 21app, English.

XX
 CC The present invention is concerned with a number of human single
 CC nucleotide polymorphisms (SNPs) which the inventors identified in human
 CC genes. These SNPs can be used in disease diagnosis and prediction of an
 CC individual's susceptibility to disease, in forensic and paternity testing
 CC and in genetic mapping. In particular, the SNPs of the invention can be
 CC used to diagnose susceptibility to diseases of the cardiovascular,
 CC endocrine and neurological systems, such as coronary artery disease,
 CC schizophrenia, cancer, autoimmune diseases, Alzheimer's and Parkinson's
 CC diseases
 CC
 SQ Sequence 18 BP; 4 A; 7 C; 4 G; 3 T; 0 U; 0 Other;
 QY
 Query Match 2.8%; Score 11.8; DB 1; Length 18;
 Best Local Similarity 86.7%; Pred. No. 5.6e+02;
 Matches 13; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
 Db 236 GGGAGGCTGCTTCCC 250
 |||||
 1 GAGAGGCTCTCTCCC 15
 RESULT 1154
 AAAS2014
 ID AAAS2014 standard; cDNA; 18 BP.
 XX
 AC AAAS2014;
 XX
 DT 19-DEC-2000 (first entry)
 XX
 DE Antisense oligonucleotide directed against PI3K p85 subunit.
 XX
 KW Phosphatidylinositol 3-kinase; PI3K; p85; p110; heterodimer; hormone;
 KW growth factor; receptor; antisense; inhibition; expression; diagnosis;
 KW modulation; growth factor mediated cell transformation; mitogenesis;
 KW protein trafficking; cell survival; cell proliferation; DNA synthesis;
 KW apoptosis; neurite outgrowth; insulin-stimulated glucose transport; ss.
 XX
 OS Synthetic.
 XX
 PN US6100090-A.
 XX
 PD 08-AUG-2000.
 XX
 PF 25-JUN-1999; 99US-00344521.
 XX
 PR 25-JUN-1999; 99US-00344521.
 XX
 PA (ISIS-) ISIS PHARM INC.
 XX
 PI Montia BP, Cowseert LM;
 XX
 DR WPI; 2000-542426/49.
 XX
 PD Antisense compounds targeted to the coding region of human
 PT phosphatidylinositol 3-kinase (PI3K) p85 and inhibiting PI3K p85
 PT expression, useful for treating disorders associated with PI3K p85
 PT expression.
 XX
 PS Claim 11; Col 39; 32pp; English.
 XX
 CC The phosphatidylinositol 3-kinases (PI3Ks) represent a ubiquitous family
 CC of heterodimeric lipid kinases that are found in association with the
 CC cytoplasmic domain of hormone and growth factor receptors and oncogene
 CC products. PI3Ks act as downstream effectors of these receptors, are
 CC recruited upon receptor stimulation and mediate the activation of second
 CC messenger signaling pathways. The PI3 kinase enzyme consists of a 110KD
 CC catalytic subunit (p110) associated with an 85KD regulatory subunit (p85)
 CC and it is through the SH2 domains of the p85 subunit that the enzyme
 CC associates with the membrane bound receptors. PI3Ks have been implicated
 CC in many cellular activities including growth factor mediated cell
 CC transformation, mitogenesis, protein trafficking, cell survival and
 CC proliferation. DNA synthesis, apoptosis, neurite outgrowth and insulin-

OS Arabidopsis sp.

XX WO200107586-A2.
 XX
 XX 01-FEB-2001.
 XX
 XX 21-JUL-2000; 2000WO-CA000860.
 XX
 XX 22-JUL-1999; 99US-0145013P.
 XX
 XX (UYBR-) UNITV BRITISH COLUMBIA.
 XX
 XX Kunst L, Clemens S;
 XX
 XX WPI; 2001-168548/17.
 XX
 XX Novel nucleic acid sequence encoding plant long chain fatty acid (LCFA)
 PT condensating enzyme (fatty acid elongase) useful for producing transgenic
 PT plants having altered fatty acid content in the tissues.
 XX
 XX Example 1; Page 16; 32pp; English.
 XX
 XX The present invention relates to a plant long chain fatty acid condensating
 CC enzyme, KCS2 (beta-ketoadyl-coenzyme A synthase 2). The invention is
 CC useful in cosuppression or antisense inhibition, as a plant breeding
 CC tool, as molecular markers to aid in plant breeding programs and in
 CC screening
 XX
 XX Sequence 18 BP; 7 A; 3 C; 6 G; 2 T; 0 U; 0 Other;
 SQ
 Query Match 2.8%; Score 11.8; DB 1; Length 18;
 Best Local Similarity 86.7%; Pred. No. 5.6e+02;
 Matches 13; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
 QY 403 TCTTACGTCGATCG 417
 Db 15 TCTACTCCGTCGATCG 1
 RESULT 1158
 AAF79669/c
 ID AAF79669 standard; DNA; 16 BP.
 XX
 XX AAF79669;
 XX
 XX 29-MAY-2001 (first entry)
 XX
 XX Human Akt-3 antisense oligonucleotide, SEQ ID NO: 77.
 DE
 XX Human; Akt-3; protein kinase; cytosolic; antiinflammatory; infection;
 KM antisense therapy; inflammation; tumour; ss.
 KM
 XX Homo sapiens.
 OS
 XX US6187586-B1.
 XX
 XX 13-FEB-2001.
 PD
 XX 29-DEC-1999; 99US-00474922.
 PF
 XX 29-DEC-1999; 99US-00474922.
 PR
 XX (ISIS-) ISIS PHARM INC.
 PA
 XX Monia BP, Cowseert LM, Roth RA;
 PI
 XX WPI; 2001-264979/27.
 DR
 XX New antisense compounds targeting nucleic acids encoding human Akt-3
 PT useful for treating a disease or condition associated with Akt-3
 PT expression, or in preventing or delaying inflammation or tumor formation.
 XX
 XX Claim 1; Col 40; 37pp; English.
 PS

CC The present sequence is one of a number of antisense compounds of up to
 CC 30 nucleobases in length targeted to a nucleic acid encoding human Akt-3.
 CC The antisense compounds are useful for inhibiting the expression of human
 CC Akt-3 in human cells or tissues. They are also useful for modulating the
 CC expression of Akt-3, and for treating a human or an animal suspected of
 CC having, or being prone to, a disease or condition associated with Akt-3
 CC expression. The antisense compounds may also be used as research
 CC reagents, in kits and in diagnostics, e.g. to elucidate the function of a
 CC particular gene or to distinguish between functions of various members of a
 CC biological pathway; and as a prophylactic, e.g. to prevent or delay
 CC infection, inflammation or tumour formation
 XX
 XX Sequence 18 BP; 3 A; 7 C; 4 G; 4 T; 0 U; 0 Other;
 SQ
 Query Match 2.8%; Score 11.8; DB 1; Length 18;
 Best Local Similarity 86.7%; Pred. No. 5.6e+02;
 Matches 13; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
 QY 292 TGGTGAAGACCTGA 306
 Db 15 TGGTGAAGACCTGA 1
 RESULT 1159
 AAF99484/c
 ID AAF99484 standard; DNA; 18 BP.
 XX
 XX AAF99484;
 XX
 XX 12-JUN-2001 (first entry)
 XX
 XX Immunostimulatory nucleic acid #600.
 DE
 XX Vaccine; cytostatic; virucidal; bactericidal; fungicidal; anti-parasitic;
 KM immunostimulatory; tumour; viral infection; bacterial infection;
 KM fungal infection; parasitic infection; cancer; asthma;
 KM infectious disease; allergy; immune deficiency; phosphorothioate; ss.
 KM
 XX Synthetic.
 OS
 XX WO200122972-A2.
 XX
 XX 25-SEP-2000; 2000WO-US026383.
 PF
 XX 25-SEP-1999; 99US-0156113P.
 PR
 XX 27-SEP-1999; 99US-0156135P.
 PR
 XX 23-AUG-2000; 2000US-0227436P.
 XX
 XX (IOWA) UNITV IOWA RES FOUND.
 PA (COLE-) CODEY PHARM GMBH.
 XX
 XX Kriegl AM, Schettler C, Vollmer U;
 PI
 XX WPI; 2001-273485/28.
 DR
 XX Vaccinating against tumors, infectious diseases, allergies and asthma
 PT using immunostimulatory Py-rich and TG nucleic acids.
 PT
 XX Claim 101; Page 51; 338pp; English.
 PS
 XX The present invention relates to a method for stimulating an immune
 CC response. The method comprises administering an immunostimulatory nucleic
 CC acid to a non-rodent subject in sufficient quantity to stimulate an
 CC immune response. The present sequence is one such immunostimulatory
 CC nucleic acid. The immunostimulatory nucleic acids can be pyrimidine rich
 CC (py-rich) or thymidine (T) rich. The method is used to vaccinate subjects
 CC against tumour antigens, viral antigens (e.g. herpesviridae, retroviridae
 CC and/or orthomyxoviridae), bacterial antigens (e.g. toxoplasma,
 CC haemophilus, campylobacter, clostridium, Baccherichia coli and/or
 CC staphylococcus), fungal antigens and/or parasitic antigens. The method is
 CC also useful for preventing cancer, asthma, infectious disease, allergy or

CC Immune deficiency. The present sequence can also be used to redirect a
CC T12 to a T11 immune response and to activate immune cells. Note: the
CC present sequence may have a phosphorothioate backbone

XX Sequence 18 BP; 0 A; 6 C; 9 G; 3 T; 0 U; 0 Other;

Query Match 2.8%; Score 11.8; DB 1; Length 18;

Best Local Similarity 86.7%; Pred. No. 5.6e+02; Mismatches 2; Indels 0; Gaps 0;

Db 379 ACCGCGACGACGCG 393
15 ACCGCGCGGACGCG 1

RESULT 1160

AAH75367/c
ID AAH75367 standard; DNA; 18 BP.

XX AAH75367;

DT 02-OCT-2001 (first entry)

DE Atrophaneura alcinous protein 3' RACE primer 3.

XX Lepidopteran; insect; agricultural chemical development; PCR primer; ss.

OS Atrophaneura alcinous.

XX Synthetic.

PN JF2001128689-A.

PD 15-MAY-2001.

PF 09-AUG-2000; 2000JP-00241272.

PR 24-AUG-1999; 99JP-00236700.

PA (SUNR) SUNTORY LTD.

DR WPI; 2001-445694/48.

XX New protein derived from lepidopteran insects, useful for screening of

PT oviposition control substance.

XX Example 3; Page 6; 13pp; Japanese.

XX The invention relates to a protein derived from lepidopteran insects,
CC especially a protein obtained from the fore-legs of Atrophaneura alcinous
CC useful in the development of agricultural chemicals. The present sequence
CC is that of a 3' RACE primer of the invention

XX Sequence 18 BP; 4 A; 8 C; 3 G; 3 T; 0 U; 0 Other;

Query Match 2.8%; Score 11.8; DB 1; Length 18;

Best Local Similarity 86.7%; Pred. No. 5.6e+02;

Matches 13; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 35 GACGGAAGTGGCCA 49

Db 18 GGTGGAAGTGGCCA 4

RESULT 1161

AAH75367/c
ID AAH75367 standard; DNA; 18 BP.

XX AAH75367;

DT 18-DEC-2001 (first entry)

DE Human PTEN antisense oligonucleotide ISIS 29558.

XX

KM Human; PTEN; MNA1; TEPI; protein phosphatase; antisense; ss;
KM antiinflammatory; cytotoxic; antidiabetic; antileptemic; infection;
KM inflammation; tumour; diabetes; insulin resistance; insulin sensitivity;
KM triglyceride control; cholesterol control; ISIS 29558.

XX Homo sapiens.

OS Synthetic.

XX Key location/Qualifiers

FT modified_base 1..18

FT modified_base 1..18

FT modified_base 1..18

FT modified_base 1..18

FT modified_base 1..18

FT modified_base 1..18

FT modified_base 1..18

FT modified_base 1..18

FT modified_base 1..18

FT modified_base 1..18

FT modified_base 1..18

FT modified_base 1..18

FT modified_base 1..18

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FT modified_base 1..18

FT modified_base 1..18

FT modified_base 1..18

FT modified_base 1..18

FT modified_base 1..18

FT modified_base 1..18

FT modified_base 1..18

FT modified_base 1..18

FT modified_base 1..18

FT modified_base 1..18

FT modified_base 1..18

FT modified_base 1..18

FT modified_base 1..18

FT modified_base 1..18

FT modified_base 1..18

FT modified_base 1..18

FT modified_base 1..18

FT modified_base 1..18

location/Qualifiers
/tag= a
/note= "Phosphorothioate backbone"
/tag= b
/note= "Optionally 2'-methoxyethyl residue (2'-MOE). When
1-4 are 2'-MOE all cytosines in this region are 5-
methylcytosines"
15..18
/tag= c
/note= "Optionally 2'-methoxyethyl residue (2'-MOE). When
15-18 are 2'-MOE all cytosines in this region are 5-
methylcytosines"

US6284538-B1.

04-SEP-2001.

24-MAY-2000; 2000US-00577902.

21-JUL-1999; 99US-00358381.

14-DEC-1999; 99MO-US029594.

(ISIS-) ISIS PHARM INC.

Monia BP, Cowsext LM, McKay R;

WPI; 2001-588976/66.

XX New antisense oligonucleotides targeting nucleic acids encoding PTEN,

PT useful for treating diabetes, increasing insulin sensitivity, or

PT decreasing insulin resistance, blood triglyceride or cholesterol levels

PT in a diabetic animal.

XX Example 15; Col 41; 38pp; English.

XX The invention relates to a compound targeted to a nucleic acid encoding

CC PTEN (a dual specificity protein phosphatase), where the compound is an

CC antisense oligonucleotide. The antisense oligonucleotides are useful in

CC modulating the function of nucleic acids encoding PTEN, ultimately

CC modulating the amount of PTEN produced. The antisense compounds can be used

CC as diagnostics, therapeutics, prophylactics (e.g. to prevent or delay

CC infection, inflammation or tumour formation), and as research agents and

CC kits. The antisense compounds are also useful in treating diabetes,

CC decreasing insulin resistance, increasing insulin sensitivity and

CC decreasing blood triglyceride or cholesterol levels in a diabetic animal.

CC The present sequence is an antisense oligonucleotide targeting the DNA

CC encoding PTEN (also known as MNA1/TEPI)

XX Sequence 18 BP; 6 A; 3 C; 2 G; 7 T; 0 U; 0 Other;

QY 406 TCTACGTGATCGAGA 420

Db 18 TCTATGTGATCAAGA 4

RESULT 1162

AAH39010
ID AAH39010 standard; DNA; 18 BP.

XX


```

OS Synthetic.
XX JF2000270896-A.
XX 03-OCT-2000.
XX 28-JAN-1999; 99JP-00019915.
XX 28-JAN-1999; 99JP-00019915.
XX (CANO ) CANON KK.
XX WPI; 2001-027424/04.
XX
XX A preparation of a probe-combined substrate, a probe array, detection of
XX a target substance, specification of the base sequence of a single-
XX stranded nucleic acid in a sample, and determination of a target
XX substance in a sample.
XX
XX Example 3; Page 15; 20pp; Japanese.
XX
XX This invention relates to a probe-combined substrate, a probe array, and
XX a method for the detection of a target substance in a sample. The probe
XX array can be used for detecting a target substance with high reliability.
XX Sequences AAC99241 - AAC99305 represent probes used in an array in an
XX example illustrating the invention
XX
XX Sequence 18 BP; 3 A; 3 C; 7 G; 5 T; 0 U; 0 Other;
SQ
XX
XX Query Match 2.8%; Score 11.8; DB 1; Length 18;
XX Best Local Similarity 86.7%; Pred. No. 5.6e+02;
XX Matches 13; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
XX
XX 297 AAGAGCTGAGCCCC 311
XX 18 ATGAACTGAGCCCC 4
XX
XX RESULT 1165
XX AAS10228
XX ID AAS10228 standard; DNA; 18 BP.
XX
XX AAS10228;
XX
XX 24-OCT-2001 (first entry)
XX
XX Antisense oligonucleotide for human integrin alpha 4, ISIS 24449.
XX
XX Integrin alpha 4; antisense; very late antigen 4; VLA4;
XX autoimmune disease; inflammatory disease; rheumatoid arthritis;
XX multiple sclerosis; tumor metastasis; melanoma; asthma; psoriasis;
XX allergy; Grave's disease; Hashimoto's thyroiditis; oligonucleotide;
XX systemic lupus erythematosus; allograft rejection; ISIS 24449; ss.
XX
XX Homo sapiens.
XX Synthetic.
XX
XX Key Location/Qualifiers
XX modified_base 1..18
XX /tag= a
XX /mod_base= OTHER
XX /note= "Other= all cytosines are 5-methyl cytosine"
XX modified_base 1..18
XX /tag= b
XX /mod_base= OTHER
XX /note= "Other= Phosphorothioate backbone"
XX modified_base 1..14
XX /tag= c
XX /mod_base= OTHER
XX /note= "Other= 2' methoxyethoxy residues"
XX modified_base 5..14
XX /tag= d
XX /mod_base= OTHER

```

```

FT modified_base 15..18 /note= "Other= 2' deoxy residues"
FT /tag= e
FT /mod_base= OTHER
FT /note= "Other= 2' methoxyethoxy residues"
XX
XX US6258790-B1.
XX 10-JUL-2001.
XX
XX 19-AUG-1999; 99US-00377309.
XX
XX 05-OCT-1998; 98US-0016203.
XX
XX (ISIS-) ISIS PHARM INC.
XX Bennett CF, Condon TP, Cowsett LM;
XX WPI; 2001-450381/48.
XX
XX Composition for treating inflammatory and autoimmune diseases, comprises
XX antisense compound targeted to nucleic acid molecule encoding integrin
XX alpha4 and inhibit expression of integrin alpha4.
XX
XX Example 8; Col 25; 49pp; English.
XX
XX The sequence is an antisense oligonucleotide targeting human integrin 4,
XX a protein involved in autoimmune and inflammatory diseases. The invention
XX relates to antisense inhibitors of integrin alpha 4 which target and
XX inhibit expression of integrin alpha 4. The antisense molecules are
XX useful for inhibiting the expression of integrin alpha4 in human cells or
XX tissues, treating an animal having a disease or condition associated with
XX expression of integrin alpha4, e.g., inflammatory disease or condition,
XX autoimmune disease or condition including rheumatoid arthritis, multiple
XX sclerosis and tumor metastases, melanoma, asthma, psoriasis, allergy,
XX Grave's disease, Hashimoto's thyroiditis, systemic lupus erythematosus
XX and allograft rejection, and diseases or conditions characterized by
XX leukocyte migration into affected tissues, preferably central nervous
XX system tissues. The antisense molecules are also useful for reducing the
XX levels of VLA-4 and alpha4beta7 integrin in human cells or tissues, and
XX reducing the adherence of cells of a first type e.g., melanoma cells or
XX lymphocytes, to cells of a second type e.g., endothelial cells, by
XX inhibiting integrin alpha4 expression and thus decreasing adhesion of
XX cells
XX
XX Sequence 18 BP; 2 A; 5 C; 7 G; 4 T; 0 U; 0 Other;
SQ
XX
XX Query Match 2.8%; Score 11.8; DB 1; Length 18;
XX Best Local Similarity 86.7%; Pred. No. 5.6e+02;
XX Matches 13; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
XX
XX 98 CACGCTGACGCGGA 112
XX 2 CACGCTGACGCGGA 16
XX
XX RESULT 1166
XX AAD19348/C
XX ID AAD19348 standard; DNA; 18 BP.
XX
XX AAD19348;
XX
XX 18-DEC-2001 (first entry)
XX
XX Mammalian PAC93.1 DNA sequencing reverse PCR primer, inter.
XX Interleukin-12; IL-12 p40; autoimmune disease; Th1/Th2 dysregulation;
XX therapy; allelic variant; insulin dependant diabetes mellitus; IDDM;
XX PCR primer; ss.
XX Mammalia.
XX
XX WO200173035-A1.

```

XX 04-OCT-2001.
 PD
 XX
 XX 27-MAR-2001; 2001WO-AU000340.
 PF
 XX
 PR 27-MAR-2000; 2000AU-00006466.
 PR 15-MAY-2000; 2000US-0204366P.
 XX
 PA (HALL-) HALL INST MEDICAL RES WALTER & ELIZA.
 XX
 PI Morahan G;
 XX
 DR WPI; 2001-611629/70.
 PT
 PT Screening mammals for autoimmune diseases such as diabetes, comprises
 PT identifying polymorphisms in interleukin (IL)-12 p40.
 XX
 PS Disclosure; Page 44; 115pp; English.
 XX
 CC The patent discloses a method of screening mammals for autoimmune
 CC diseases by identifying polymorphisms in interleukin (IL)-12 p40 gene.
 CC The methods and kits of the invention are used for screening individuals,
 CC families and populations for disease conditions or predispositions for
 CC the development of a disease condition which is characterized,
 CC exacerbated or associated with Th1/Th2 dysregulation in a mammal. They
 CC are used to treat, prevent or diagnose autoimmune diseases such as IDDM
 CC (Insulin dependant diabetes mellitus). The present DNA sequence is a
 CC reverse PCR primer, Int6r used for sequencing mammalian P4C93.1 DNA which
 CC is used as a template for determining the complete IL-12 p40 genomic
 CC sequence
 CC
 SQ Sequence 18 BP; 4 A; 4 C; 6 G; 4 T; 0 U; 0 Other;
 Query Match 2.8%; Score 11.8; DB 1; Length 18;
 Best Local Similarity 86.7%; Pred. No. 5.6e+02;
 Matches 13; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
 QY 260 CACGGTGCACTTGA 274
 Db 15 CTCAGTGCACCTGGA 1
 RESULT 1167
 AAD19276/C
 ID AAD19276 standard; DNA; 18 BP.
 XX
 AC AAD19276;
 XX
 DT 18-DEC-2001 (first entry)
 XX
 DE PCR primer #2, to detect polymorphism in mammalian IL-12 p40 exon 7.
 XX
 KM Interleukin-12; IL-12 p40; autoimmune disease; Th1/Th2 dysregulation;
 KM therapy; Tag1+ allelic variant; insulin dependant diabetes mellitus;
 KM IDDM; PCR primer; ss.
 XX
 OS Mammalia.
 XX
 PN WO200173035-A1.
 XX
 PD 04-OCT-2001.
 XX
 PF 27-MAR-2001; 2001WO-AU000340.
 XX
 PR 27-MAR-2000; 2000AU-00006466.
 PR 15-MAY-2000; 2000US-0204366P.
 XX
 PA (HALL-) HALL INST MEDICAL RES WALTER & ELIZA.
 XX
 PI Morahan G;
 XX
 DR WPI; 2001-611629/70.
 XX

PT Screening mammals for autoimmune diseases such as diabetes, comprises
 PT identifying polymorphisms in interleukin (IL)-12 p40.
 XX
 PS Example 6; Page 41; 115pp; English.
 XX
 CC The patent discloses a method of screening mammals for autoimmune
 CC diseases by identifying polymorphisms in interleukin (IL)-12 p40 gene.
 CC The methods and kits of the invention are used for screening individuals,
 CC families and populations for disease conditions or predispositions for
 CC the development of a disease condition which is characterized,
 CC exacerbated or associated with Th1/Th2 dysregulation in a mammal. They
 CC are used to treat, prevent or diagnose autoimmune diseases such as IDDM
 CC (Insulin dependant diabetes mellitus). The present DNA sequence is a PCR
 CC primer which is used for detecting polymorphism in mammalian IL-12 p40
 CC exon 7
 CC
 SQ Sequence 18 BP; 4 A; 4 C; 6 G; 4 T; 0 U; 0 Other;
 Query Match 2.8%; Score 11.8; DB 1; Length 18;
 Best Local Similarity 86.7%; Pred. No. 5.6e+02;
 Matches 13; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
 QY 260 CACGGTGCACTTGA 274
 Db 15 CTCAGTGCACCTGGA 1
 RESULT 1168
 ABK72456/C
 ID ABK72456 standard; DNA; 18 BP.
 XX
 AC ABK72456;
 XX
 DT 13-AUG-2002 (first entry)
 XX
 DE Sample originonucleotide #18 for analysing nucleic acid base sequence.
 XX
 KM Nucleic acid base sequence analysis; DNA diagnosis; probe; ss.
 XX
 OS Synthetic.
 XX
 PN WO200233066-A1.
 XX
 PD 25-APR-2002.
 XX
 PF 18-OCT-2000; 2000WO-JP007244.
 XX
 PR 18-OCT-2000; 2000WO-JP007244.
 XX
 PA (CANO) CANON KK.
 XX
 PI Yamamoto N, Okamoto T, Suzuki T;
 XX
 DR WPI; 2002-372310/40.
 XX
 PT Screening an unknown base sequence at a defined site of a target single-
 PT stranded nucleic acid for use in DNA diagnosis and therapy, comprises a
 PT DNA chip, fluorescence yield and pattern-based method.
 XX
 PS Example 1; Page 13; 53pp; Japanese.
 XX
 CC The present invention relates to a method of analysing an unknown nucleic
 CC acid base sequence. The method comprises preparing a probe array,
 CC hybridising with the probe array, measuring the fluorescence yield in the
 CC reaction, obtaining a template pattern, producing a sample pattern, and
 CC comparing the sample pattern with the template pattern. The method is
 CC useful for specifying an unknown base sequence at a defined site of a
 CC target single-stranded nucleic acid, which is useful for analysing a
 CC nucleic acid base sequence. The method is applicable in DNA diagnosis and
 CC therapy, and is useful in medicine and biology. Measuring the
 CC fluorescence yield allows the detection of a one-base mismatch which can
 CC be considered to produce high detection accuracy. The hybrid pattern of
 CC the DNA probe is used so the difference in thermostability is less

KW prophylaxis; hyperproliferative condition; infection; inflammation;
 KM therapy; phosphorothioate; ss.
 XX
 OS Homo sapiens.
 OS Synthetic.
 XX
 FH Key
 FT modified_base
 FT 1..18
 FT /tag= a
 FT /mod_base= OTHER
 FT /note= "Phosphorothioate backbone"
 FT 1..4
 FT /tag= b
 FT /mod_base= OTHER
 FT /note= "2'-methoxyethyl nucleotides"
 FT 3
 FT /tag= d
 FT /mod_base= m5c
 FT 15..18
 FT /tag= c
 FT /mod_base= OTHER
 FT /note= "2'-methoxyethyl nucleotides"
 FT 15..16
 FT /tag= e
 FT /mod_base= m5c
 FT
 FT modified_base
 FT 15..18
 FT /tag= c
 FT /mod_base= OTHER
 FT /note= "2'-methoxyethyl nucleotides"
 FT 15..16
 FT /tag= e
 FT /mod_base= m5c
 FT
 PN WO200240637-A2.
 XX
 XX 23-MAY-2002.
 XX
 PF 19-NOV-2001; 2001MO-US045006.
 XX
 XX 20-NOV-2000; 2000US-00715983.
 XX
 XX (ISIS-) ISIS PHARM INC.
 PA
 PA Monia BP, Cowesert LM, Murray SF, Butler KM, Dean NM;
 PI WPI; 2002-519374/55.
 XX
 DR Antisense compounds targeted against polynucleotides encoding PI3K p85
 XX
 PT useful for treating e.g. cancer, Type 2 diabetes, obesity.
 PT
 XX
 PS Claim 3; Page 79; 121pp; English.
 XX
 CC The invention relates to antisense compounds targeted to a nucleic acid
 CC molecule encoding PI3K p85 to inhibit its expression. Antisense
 CC compounds of the invention are used for treating obesity, Type 2 diabetes
 CC and hyperproliferative condition e.g. cancer. They may also be useful
 CC prophylactically, e.g. to prevent or delay infection, inflammation or
 CC tumour formation. Antisense compounds either alone or in combination with
 CC other antisense compounds or therapeutics can be used as tools in
 CC differential and/or combinatorial analyses to elucidate expression
 CC patterns of a portion or the entire complement of genes expressed within
 CC cells and tissues. They are commonly used as research reagents and
 CC diagnostics. The present sequence is an antisense oligonucleotide
 CC targeted to human PI3K p85 DNA
 CC
 SQ Sequence 18 BP; 1 A; 6 C; 0 G; 11 T; 0 U; 0 Other;
 XX
 QY Query Match 2.8%; Score 11.8; DB 1; Length 18;
 Db Best Local Similarity 86.7%; Pred. No. 5.6e+02;
 Matches 13; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
 QY 362 CTTCCTCCTTCTTCT 376
 Db 3 CTTCCTCCTTCTTCT 17
 RESULT 1172
 ABL54918/c
 ID ABL54918 standard; DNA; 18 BP.
 XX

AC ABL54918;
 XX
 DT 18-JUN-2002 (first entry)
 XX
 DE Human tumour suppressor gene p53 probe #18.
 XX
 KM Human; p53; probe; variation detection; DNA array; ss.
 KM
 OS Homo sapiens.
 OS
 XX EPI184467-A2.
 XX
 PD 06-MAR-2002.
 XX
 PF 31-AUG-2001; 2001EP-00307415.
 XX
 PR 31-AUG-2000; 2000JP-00263396.
 XX
 PA (CANO) CANON KK.
 XX
 PI Yamamoto N, Okamoto T, Tanaka S, Suzuki T;
 DR WPI; 2002-271043/32.
 XX
 PT Screening for gene variation by using DNA array in which probes giving
 PT strong signals forming hybrids with normal sequence, and probes having
 PT sequences expected to form hybrids with variants are separately arranged.
 XX
 PS Example 2; Page 6; 22pp; English.
 XX
 CC The sequence represents a two-base mismatch probe designed to detect a
 CC variation a specific base in the p53 gene sequence. The invention relates
 CC to a novel method for screening for a variation in a nucleic acid
 CC sequence. The method involves using a DNA array in which a group of
 CC probes which will give strong signals forming hybrids with a normal gene
 CC sequence, and a group of probes having sequences expected to form hybrids
 CC with gene variants are separately arranged. The method is useful for
 CC screening for the presence or absence of variation in a nucleic acid
 CC sequence. The method is also useful for mass screening to determine
 CC rapidly the presence or absence of a gene variation without need of an
 CC expensive apparatus and a complex analysis
 CC
 SQ Sequence 18 BP; 3 A; 3 C; 7 G; 5 T; 0 U; 0 Other;
 XX
 QY Query Match 2.8%; Score 11.8; DB 1; Length 18;
 Db Best Local Similarity 86.7%; Pred. No. 5.6e+02;
 Matches 13; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
 QY 297 AAGAGCTGAGCCCC 311
 Db 18 ATGAGCTGAGCCCC 4
 RESULT 1173
 ABL54918/c
 ID ABL54918 standard; DNA; 18 BP.
 XX
 AC ABL54918;
 XX
 DT 13-DEC-2002 (first entry)
 XX
 DE Angiogenesis inhibitor; ss; angiogenesis; solid tumour growth;
 XX
 KM Angiogenesis inhibitor; ss; angiogenesis; solid tumour growth;
 KM tumour metastasis; precancerous lesion; rheumatoid arthritis; psoriasis;
 KM diabetic retinopathy; retinopathy of prematurity; macular degeneration;
 KM corneal graft rejection; neovascular glaucoma; retrolental fibroplasia;
 KM rubecosis; Osler-Webber Syndrome; myocardial angiogenesis;
 KM plaque neovascularisation; telangiectasia; haemophilic joint;
 KM angiodysplasia; wound granulation; intestinal adhesion; atherosclerosis;
 KM scleroderma; hypertrophic scar.
 KM
 OS Synthetic.
 OS

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XX
XX WO200253141-A2.
XX
XX 11-JUL-2002.
XX
XX 14-DEC-2001; 2001WO-US048458.
XX
XX 14-DEC-2000; 2000US-0255534P.
XX
XX (COLE-) COLEY PHARM GROUP INC.
XX
XX Bratzler RL;
XX
XX WPI; 2002-566690/60.
XX
XX Inhibiting angiogenesis in a subject, involves administering at least one
XX
XX antiangiogenic nucleic acid molecule to the subject.
XX
XX
XX Claim 2; Page 31; 276pp; English.
XX
XX The invention relates to inhibiting angiogenesis in a subject, comprising
XX
XX administering at least one antiangiogenic nucleic acid molecule. Also
XX
XX included is a kit comprising a first container housing the antiangiogenic
XX
XX nucleic acids, and instructions for administering them to a subject
XX
XX having a condition characterised by unwanted angiogenesis. The method is
XX
XX useful for inhibiting angiogenesis associated with solid tumour growth,
XX
XX tumour metastasis, precancerous lesion, rheumatoid arthritis, psoriasis,
XX
XX diabetic retinopathy, retinopathy of prematurity, macular degeneration,
XX
XX corneal graft rejection, neovascular glaucoma, retrolental fibroplasia,
XX
XX rubeosis, Osler-Weber Syndrome, myocardial angiogenesis, plaque
XX
XX neovascularisation, telangiectasia, haemophilic joints, angiodioma,
XX
XX wound granulation, intestinal adhesions, atherosclerosis, scleroderma and
XX
XX hypertrophic scars. The present sequence is an antiangiogenic nucleic
XX
XX acid of the invention
XX
XX
XX Sequence 18 BP; 0 A; 6 C; 9 G; 3 T; 0 U; 0 Other;
XX
XX
XX Query Match 2.8%; Score 11.8; DB 1; Length 18;
XX
XX Best Local Similarity 86.7%; Pred. No. 5.6e+02;
XX
XX Matches 13; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
XX
XX
XX 379 ACCGCGACGACGCGC 393
XX
XX 15 ACCGCGCGACGCGC 1
XX
XX
XX RESULT 1174
XX
XX AAS17140/c
XX
XX ID AAS17140 standard; DNA; 18 BP.
XX
XX
XX AAS17140;
XX
XX
XX 14-FEB-2002 (first entry)
XX
XX
XX Human acid sensing ion channel subunit 3, ASIC3A, RT-PCR primer #1.
XX
XX
XX Human; ss: acid sensing ion channel; ASIC3A; analgesic; anti-HIV;
XX
XX neuroprotective; nootropic; antiparkinsonian; anticonvulsant;
XX
XX cerebrioprotective; cardiac; antianginal; hypotensive; RT-PCR primer;
XX
XX antithrombotic; vasotropic; tranquiliser; antidepressant;
XX
XX chronic pain; neuropathic pain; diabetes; cancer; AIDS;
XX
XX acquired immunodeficiency syndrome; neurodegenerative disease;
XX
XX Alzheimer's disease; Parkinson's disease; Huntington's disease;
XX
XX Creutzfeldt-Jacob disease; amyotrophic lateral sclerosis; dementia;
XX
XX convulsion; epilepsy; stroke; anxiety; depression; angina;
XX
XX cardiovascular disease; congestive heart failure; vasoconstriction;
XX
XX hypertension; atherosclerosis; restenosis; bleeding; gene therapy.
XX
XX
XX Homo sapiens.
XX
XX
XX WO200181570-A2.
XX
XX
XX 01-NOV-2001.

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XX
XX 20-APR-2001; 2001WO-CA000561.
XX
XX PF 20-APR-2000; 2000CA-02304494.
XX
XX PR 20-APR-2000; 2000CA-02304494.
XX
XX PA (UTMC-) UNIV MCGILL.
XX
XX PI Seguela P, Babinski K;
XX
XX DR WPI; 2002-055353/07.
XX
XX
XX New heteromultimeric proton-gated ion channel for diagnosing, treating
XX
XX diseases associated with expression of the channel e.g. neurodegenerative
XX
XX diseases, comprises two different types of acid sensing ion channel
XX
XX subunits.
XX
XX
XX Example 3; Page 102; 105pp; English.
XX
XX
XX The invention relates to a protein complex forming a heteromultimeric
XX
XX anion- and gadolinium-sensitive proton-gated cation channel (ASIC-
XX
XX 2S.2), where the individual components of the heteromultimeric channel
XX
XX include the acid sensing ion channel (ASIC2A and ASIC3 protein or their
XX
XX variants having 80% sequence identity, the nucleic acids encoding the
XX
XX proteins, acids, low pH solutions, the nucleic acids encoding the
XX
XX subunits, a recombinant bicistronic vector comprising a nucleic acid
XX
XX subunit, at least two individual subunits or variants of ASIC-2S.2, a
XX
XX host cell comprising the vector, an antibody raised against one of the
XX
XX subunits or a domain which is capable of disrupting assembly of the
XX
XX channel and an agonist of the ion channel. The polypeptides and
XX
XX polynucleotides are useful for diagnosing a disease or a susceptibility
XX
XX to a disease in a subject related to expression or activity of the
XX
XX heteromultimeric channel (e.g. by gene therapy using the vector). Such
XX
XX diseases include chronic pain, neuropathic pain such as diabetic-, cancer
XX
XX - and AIDS (acquired immunodeficiency syndrome)-related,
XX
XX neurodegenerative diseases such as Alzheimer's disease, Parkinson's
XX
XX disease, Huntington's disease, Creutzfeldt-Jacob disease, and amyotrophic
XX
XX lateral sclerosis and dementias, including AIDS-related as well as
XX
XX convulsions, epilepsy, stroke, anxiety and depression. They are also
XX
XX useful for treating cardiovascular diseases such as angina, congestive
XX
XX heart failure, vasoconstriction, hypertension, atherosclerosis,
XX
XX restenosis and bleeding. ASIC-2S.2 plays a role in the regulation of
XX
XX neurotransmitter release, neuronal excitability or excitotoxicity and is
XX
XX useful in screening for compounds that regulate neurotransmitter release,
XX
XX synaptic efficacy, neuroexcitability or neurotoxicity. The present
XX
XX sequence is an RT (reverse transcriptase) PCR primer used to measure the
XX
XX tissue distribution of mRNA encoding human ASIC3A
XX
XX
XX Sequence 18 BP; 3 A; 7 C; 3 G; 5 T; 0 U; 0 Other;
XX
XX
XX Query Match 2.8%; Score 11.8; DB 1; Length 18;
XX
XX Best Local Similarity 86.7%; Pred. No. 5.6e+02;
XX
XX Matches 13; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
XX
XX
XX 36 GAGGAGAGTGGCCAC 50
XX
XX 16 GAGGAGAGTGGCCAC 2
XX
XX
XX RESULT 1175
XX
XX ABL38809/c
XX
XX ID ABL38809 standard; DNA; 18 BP.
XX
XX
XX ABL38809;
XX
XX
XX 16-APR-2002 (first entry)
XX
XX
XX Immunostimulatory nucleic acid SEQ ID NO: 190.
XX
XX
XX Anticancer-induced cell lysis; cancer; immunostimulatory; CD20;
XX
XX angiogenesis; metastasis; cytostatic; ss.
XX
XX
XX Synthetic.

```

PN WO200197843-A2.
 XX
 PD 27-DEC-2001.
 XX
 PF 22-JUN-2001; 2001WO-US020154.
 XX
 PR 22-JUN-2000; 2000US-0213346P.
 XX
 PA (IOWA) UNIV IOWA RES FOUND.
 XX
 PI Weiner G, Hartmann G;
 XX WPI; 2002-154611/20.
 DR
 XX Treating or preventing cancer, such as basal cell carcinoma, comprises
 PT administering immunostimulatory nucleic acids that induce expression of
 PT cell surface antigens and antibodies to a subject having or at risk of
 PT developing cancer.
 XX
 PS Disclosure; Page 144; 312pp; English.
 XX
 CC The present invention relates to methods for treating or preventing
 CC cancer, involving administering to a subject having or at risk of
 CC developing cancer immunostimulatory nucleic acids that induce expression
 CC of cell surface antigens and antibodies. The methods are useful for
 CC treating or preventing cancer such as basal cell carcinoma, bladder
 CC cancer, bone cancer, brain and central nervous system (CNS) cancer,
 CC breast cancer, cervical cancer, colon and rectum cancer, connective
 CC tissue cancer, esophageal cancer, eye cancer, kidney cancer, larynx
 CC cancer, leukemia, liver cancer, lung cancer, Hodgkin's lymphoma, non-
 CC Hodgkin's lymphoma, melanoma, myeloma, oral cavity cancer, ovarian
 CC cancer, pancreatic cancer, prostate cancer, rhabdomyosarcoma, skin
 CC cancer, stomach cancer, testicular cancer, and uterine cancer. The
 CC present sequence is an immunostimulatory oligonucleotide described in the
 CC exemplification of the invention
 CC
 SQ Sequence 18 BP; 0 A; 6 C; 9 G; 3 T; 0 U; 0 Other;
 Query Match 2.8%; Score 11.8; DB 1; Length 18;
 Best Local Similarity 86.7%; Pred. No. 5.6e+02;
 Matches 13; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
 QY 379 ACCGCGACGACGCG 393
 DB 15 ACCGCGCGACGACGCG 1
 RESULT 1176
 ABS60920/6
 ID ABS60920 standard; DNA; 18 BP.
 XX
 AC ABS60920;
 XX
 DT 05-NOV-2002 (first entry)
 XX
 DE Human genotyping PCR primer #73.
 XX
 XX Human; ss; aminopeptidase P; XPNRP2; bradykinin receptor B1; primer;
 KW BDKRB1; tachykinin receptor B1; TACR1; C1 esterase inhibitor; C1NH;
 KW kallikrein 1; KLK1; bradykinin receptor B2; BDKRB2; gene therapy;
 KW angiotensin converting enzyme 2; ACE2; protease inhibitor 4; PI4;
 KW polymorphism; haemangioma; tumour; sarcoma; Crohn's disease; trachoma;
 KW cardiovascular disease; angina pectoris; hypertension; heart failure;
 KW myocardial infarction; ventricular hypertrophy; vascular disease;
 KW aneurysm; embolism; thrombosis; coronary artery disease; angioedema;
 KW arteriosclerosis; atherosclerosis; hyperensitivity; sepsis; PCR;
 KW autoimmune disease; inflammatory arthritis; cancer; wound; genotyping;
 KW viral infection; bacterial infection; fungal infection; COPD;
 KW chronic obstructive pulmonary disease; enterocolitis.
 XX
 OS Homo sapiens.
 XX
 PN WO200261131-A2.

XX
 PD 08-AUG-2002.
 XX
 PF 03-DEC-2001; 2001WO-US047235.
 XX
 PR 04-DEC-2000; 2000US-0251015P.
 XX
 PR 23-JAN-2001; 2001US-0263678P.
 XX
 PR 02-MAR-2001; 2001US-0273037P.
 XX
 PA (BRIM) BRISTOL-MYERS SQUIBB CO.
 PA (TSUC/) TSUCHIHASHI Z.
 PA (HUI/) HUI L.
 XX
 PI Tsuchihashi Z, Hui L, Zerba KE, Ma-Edmonds M, Perrone MH;
 PI Swanson BN, Powell JR;
 XX WPI; 2002-619265/66.
 DR
 XX New isolated nucleic acid with at least one polymorphic position, useful
 PT for detecting, diagnosing and treating disorders such as angioedema,
 PT cancer, viral, bacterial or fungal infection, cardiovascular and
 PT autoimmune diseases.
 XX
 PS Example 3; Page 900; 977pp; English.
 XX
 CC The invention relates to an isolated nucleic acid from a human gene
 CC encoding aminopeptidase P (XPNRP2), bradykinin receptor B1 (BDKRB1),
 CC tachykinin receptor B1 (TACR1), C1 esterase inhibitor (C1NH), kallikrein
 CC 1 (KLK1), bradykinin receptor B2 (BDKRB2), angiotensin converting enzyme
 CC 2 (ACE2) or protease inhibitor 4 (PI4), comprising at least one
 CC polymorphic position. Also included are (1) a probe that hybridises to a
 CC polymorphic position as provided in the detailed summary of single
 CC nucleotide polymorphisms comprising additional 5' and 3' flanking genomic
 CC sequence; (2) analysing (M1) at least one nucleic acid sample comprising
 CC obtaining the sample from one or more individuals and determining the
 CC nucleic acid sequence at one or more polymorphic positions in a gene
 CC encoding a protein selected from the group above; (3) constructing (M2)
 CC haplotypes using the genes comprising grouping at least two nucleic acids
 CC (4) identifying (M3) an individual at risk of developing a disorder
 CC upon administration of an ACE inhibitor and/or vasopressin inhibitor
 CC using the polymorphic data; (5) a library of nucleic acids, each of which
 CC comprises one or more polymorphic positions within a gene encoding a
 CC human protein selected from the group above; and (6) genotyping (M4) an
 CC individual comprising obtaining a nucleic acid sample, determining the
 CC nucleotide present in at least one polymorphic position, and comparing at
 CC least one position with a known data set. The genes, (M1, M2, M3 and M4)
 CC and compositions are useful for detecting, diagnosing, treating,
 CC preventing various disorders such as angioedema and diseases which
 CC involve angiogenesis like haemangiomas, tumours, sarcomas, Crohn's
 CC disease, trachomas, and cardiovascular diseases like angina pectoris,
 CC hypertension, heart failure, myocardial infarction, ventricular
 CC hypertrophy, vascular diseases, aneurysm, embolism, thrombosis, coronary
 CC artery disease, arteriosclerosis and/or atherosclerosis, and
 CC hypersensitivity reactions, sepsis, autoimmune diseases, inflammatory
 CC arthritis, cancer, wounds, viral, bacterial or fungal infection, Chronic
 CC obstructive pulmonary disease (COPD) and enterocolitis (many other
 CC diseases and disorders are listed in the specification). The
 CC polynucleotides are also useful for chromosome identification. Antibodies
 CC against the proteins may be utilised for immunophenotyping of cell lines
 CC and biological samples. The present sequence is a genotyping PCR primer
 CC for the gene encoding one of the proteins listed above
 CC
 SQ Sequence 18 BP; 1 A; 3 C; 8 G; 6 T; 0 U; 0 Other;
 Query Match 2.8%; Score 11.8; DB 1; Length 18;
 Best Local Similarity 86.7%; Pred. No. 5.6e+02;
 Matches 13; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
 QY 297 AAGGACCTGAGCCCC 311
 DB 16 AAGGACCTGAGCCCC 2

RESULT 1177
 ABS60947
 ID ABS60947 standard; DNA; 18 BP.
 XX
 AC ABS60947;
 XX
 DT 05-NOV-2002 (first entry)
 XX
 DE Human genotyping PCR primer #100.
 XX
 XX Human; ss; aminopeptidase P; XPNEP2; bradykinin receptor B1; primer;
 KM BDKRB1; tachykinin receptor B1; TACR1; C1 esterase inhibitor; C1NH;
 KM kallikrein 1; KLK1; bradykinin receptor B2; BDKRB2; gene therapy;
 KM angiotensin converting enzyme 2; ACE2; protease inhibitor 4; P14;
 KM polymorphisms; haemangioma; tumour; sarcoma; Crohn's disease; trachoma;
 KM cardiovascular disease; angina pectoris; hypertension; heart failure;
 KM myocardial infarction; ventricular hypertrophy; vascular disease;
 KM aneurysm; embolism; thrombosis; coronary artery disease; angioedema;
 KM arteriosclerosis; atherosclerosis; hypersensitivity; sepsis; PCR;
 KM autoimmune disease; inflammatory arthritis; cancer; wound; genotyping;
 KM viral infection; bacterial infection; fungal infection; COPD;
 KM Chronic obstructive pulmonary disease; enterocolitis.
 XX
 OS Homo sapiens.
 XX
 PN WO200261131-A2.
 XX
 PD 08-AUG-2002.
 XX
 PF 03-DEC-2001; 2001WO-US047235.
 XX
 PR 04-DEC-2000; 2000US-0251015P.
 PR 23-JAN-2001; 2001US-0263678P.
 PR 02-MAR-2001; 2001US-0273037P.
 XX
 PA (BRIM) BRISTOL-MYERS SQUIBB CO.
 PA (TSUC/) TSUCHIHASHI Z.
 PA (HUI/) HUI L.
 XX
 PI Tsuchihashi Z, Hui L, Zerba KE, Ma-Edmonds M, Perrone MH;
 PI Swanson BN, Powell JR;
 XX
 DR WPI; 2002-619265/66.
 XX
 PT New isolated nucleic acid with at least one polymorphic position, useful
 PT for detecting, diagnosing and treating disorders such as angioedema,
 PT cancer, viral, bacterial or fungal infection, cardiovascular and
 PT autoimmune diseases.
 XX
 PS Example 3; Page 905; 977pp; English.
 XX
 XX The invention relates to an isolated nucleic acid from a human gene
 CC encoding aminopeptidase P (XPNEP2), bradykinin receptor B1 (BDKRB1),
 CC tachykinin receptor B1 (TACR1), C1 esterase inhibitor (C1NH), kallikrein
 CC 1 (KLK1), bradykinin receptor B2 (BDKRB2), angiotensin converting enzyme
 CC 2 (ACE2) or protease inhibitor 4 (P14), comprising at least one
 CC polymorphic position. Also included are (1) a probe that hybridises to a
 CC polymorphic position as provided in the detailed summary of single
 CC nucleotide polymorphisms comprising additional 5' and 3' flanking genomic
 CC sequence; (2) analysing (M1) at least one nucleic acid sample comprising
 CC obtaining the sample from one or more individuals and determining the
 CC nucleic acid sequence at one or more polymorphic positions in a gene
 CC encoding a protein selected from the group above; (3) constructing (M2)
 CC haplotypes using the genes comprising grouping at least two nucleic acids
 CC; (4) identifying (M3) an individual at risk of developing a disorder
 CC upon administration of an ACE inhibitor and/or vasopeptidase inhibitor
 CC using the polymorphic data; (5) a library of nucleic acids, each of which
 CC comprises one or more polymorphic positions within a gene encoding a
 CC human protein selected from the group above; and (6) genotyping (M4) an
 CC individual comprising obtaining a nucleic acid sample, determining the
 CC nucleotide present in at least one polymorphic position, and comparing at
 CC least one position with a known data set. The genes, (M1, M2, M3 and M4)
 CC and compositions are useful for detecting, diagnosing, treating,

CC preventing various disorders such as angioedema and diseases which
 CC involve angiogenesis like haemangiomas, tumours, sarcomas, Crohn's
 CC disease, trachomas, and cardiovascular diseases like angina pectoris,
 CC hypertension, heart failure, myocardial infarction, ventricular
 CC hypertrophy, vascular diseases, aneurysm, embolism, thrombosis, coronary
 CC artery disease, arteriosclerosis and/or atherosclerosis, and
 CC hypersensitivity reactions, sepsis, autoimmune diseases, inflammatory
 CC arthritis, cancer, wounds, viral, bacterial or fungal infection, Chronic
 CC obstructive pulmonary disease (COPD) and enterocolitis (many other
 CC diseases and disorders are listed in the specification). The
 CC polymucleotides are also useful for chromosome identification. Antibodies
 CC against the proteins may be utilised for immunophenotyping of cell lines
 CC and biological samples. The present sequence is a genotyping PCR primer
 CC for the gene encoding one of the proteins listed above
 XX
 SQ Sequence 18 BP; 2 A; 5 C; 8 G; 3 T; 0 U; 0 Other;
 XX
 Query Match 2.8%; Score 11.8; DB 1; Length 18;
 Best Local Similarity 86.7%; Pred. No. 5.6e+02;
 Matches 13; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
 QY 266 GCACTGGAGCAGG 280
 DB 3 GCACTGGAGTTGG 17
 XX
 RESULT 1178
 ABS60977/c
 ID ABS60977 standard; DNA; 18 BP.
 XX
 AC ABS60977;
 XX
 DT 05-NOV-2002 (first entry)
 XX
 DE Human genotyping PCR primer #130.
 XX
 XX Human; ss; aminopeptidase P; XPNEP2; bradykinin receptor B1; primer;
 KM BDKRB1; tachykinin receptor B1; TACR1; C1 esterase inhibitor; C1NH;
 KM kallikrein 1; KLK1; bradykinin receptor B2; BDKRB2; gene therapy;
 KM angiotensin converting enzyme 2; ACE2; protease inhibitor 4; P14;
 KM polymorphisms; haemangioma; tumour; sarcoma; Crohn's disease; trachoma;
 KM cardiovascular disease; angina pectoris; hypertension; heart failure;
 KM myocardial infarction; ventricular hypertrophy; vascular disease;
 KM aneurysm; embolism; thrombosis; coronary artery disease; angioedema;
 KM arteriosclerosis; atherosclerosis; hypersensitivity; sepsis; PCR;
 KM autoimmune disease; inflammatory arthritis; cancer; wound; genotyping;
 KM viral infection; bacterial infection; fungal infection; COPD;
 KM Chronic obstructive pulmonary disease; enterocolitis.
 XX
 OS Homo sapiens.
 XX
 PN WO200261131-A2.
 XX
 PD 08-AUG-2002.
 XX
 PF 03-DEC-2001; 2001WO-US047235.
 XX
 PR 04-DEC-2000; 2000US-0251015P.
 PR 23-JAN-2001; 2001US-0263678P.
 PR 02-MAR-2001; 2001US-0273037P.
 XX
 PA (BRIM) BRISTOL-MYERS SQUIBB CO.
 PA (TSUC/) TSUCHIHASHI Z.
 PA (HUI/) HUI L.
 XX
 PI Tsuchihashi Z, Hui L, Zerba KE, Ma-Edmonds M, Perrone MH;
 PI Swanson BN, Powell JR;
 XX
 DR WPI; 2002-619265/66.
 XX
 PT New isolated nucleic acid with at least one polymorphic position, useful
 PT for detecting, diagnosing and treating disorders such as angioedema,
 PT cancer, viral, bacterial or fungal infection, cardiovascular and

PT autoimmune diseases.
 XX
 PS Example 3; Page 909; 977pp; English.
 XX
 CC The invention relates to an isolated nucleic acid from a human gene
 CC encoding aminopeptidase P (APNP2), bradykinin receptor B1 (BDKRB1),
 CC tachykinin receptor B1 (TACR1), C1 esterase inhibitor (C1NH), kallikrein
 CC 1 (KLK1), bradykinin receptor B2 (BDKRB2), angiotensin converting enzyme
 CC 2 (ACE2) or protease inhibitor 4 (PI4), comprising at least one
 CC polymorphic position. Also included are (1) a probe that hybridizes to a
 CC polymorphic position as provided in the detailed summary of single
 CC nucleotide polymorphisms comprising additional 5' and 3' flanking genomic
 CC sequence; (2) analysing (M1) at least one nucleic acid sample comprising
 CC obtaining the sample from one or more individuals and determining the
 CC nucleic acid sequence at one or more polymorphic positions in a gene
 CC encoding a protein selected from the group above; (3) constructing (M2)
 CC haplotypes using the genes comprising grouping at least two nucleic acids
 CC (4) identifying (M3) an individual at risk of developing a disorder
 CC upon administration of an ACE inhibitor and/or vasopeptidase inhibitor
 CC using the polymorphic data; (5) a library of nucleic acids, each of which
 CC comprises one or more polymorphic positions within a gene encoding a
 CC human protein selected from the group above; and (6) genotyping (M4) an
 CC individual comprising obtaining a nucleic acid sample, determining the
 CC nucleotide present in at least one polymorphic position, and comparing at
 CC least one position with a known data set. The genes, (M1, M2, M3 and M4)
 CC and compositions are useful for detecting, diagnosing, treating,
 CC preventing various disorders such as angioedema and diseases which
 CC involve angiogenesis like haemangiomas, tumours, sarcomas, Crohn's
 CC disease, trachomas, and cardiovascular diseases like angina pectoris,
 CC hypertension, heart failure, myocardial infarction, ventricular
 CC hypertrophy, vascular diseases, aneurysm, embolism, thrombosis, coronary
 CC artery disease, arteriosclerosis and/or atherosclerosis, and
 CC hypersensitivity reactions, sepsis, autoimmune diseases, inflammatory
 CC arthritis, cancer, wounds, viral, bacterial or fungal infection, chronic
 CC obstructive pulmonary disease (COPD) and enterocolitis (many other
 CC diseases and disorders are listed in the specification). The
 CC polynucleotides are also useful for chromosome identification. Antibodies
 CC against the proteins may be utilised for immunophenotyping of cell lines
 CC and biological samples. The present sequence is a genotyping PCR primer
 CC for the gene encoding one of the proteins listed above
 XX
 SQ Sequence 18 BP; 0 A; 10 C; 3 G; 5 T; 0 U; 0 Other;
 Query Match 2.8%; Score 11.8; DB 1; Length 18;
 Best Local Similarity 86.7%; Pred. No. 5.6e+02;
 Matches 13; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
 QY 29 GGAGCTGGAGCAAGA 43
 DB 17 GGAGCTGGAGCAAGA 3
 RESULT 1179
 AAD40053/c
 ID AAD40053 standard; DNA; 18 BP.
 AC AAD40053;
 XX
 XX 22-OCT-2002 (first entry)
 XX
 DE Human PTEN antisense oligonucleotide, ISIS 29598.
 XX
 XX Human; phosphoinositide phosphatase, PTEN; liver; kidney; cholesterol;
 KW metabolic disease; diabetes; hyperproliferative; glucose; insulin; PEPCK;
 KW triglyceride; antisense gene therapy; cytostatic; adipose cell;
 KW antiproliferative; antisense; phosphorothioate backbone; ss.
 XX
 OS Homo sapiens.
 OS Synthetic.
 OS
 FH Key Location/Qualifiers
 FT modified_base 1..18
 FT /*tag= a

FT /mod base= OTHER
 FT /note= "Phosphorothioate backbone"
 FT modified_base 1..4
 FT /*tag= b
 FT /mod_base= OTHER
 FT /note= "2' methoxyethyl nucleotides"
 FT modified_base 15..18
 FT /*tag= c
 FT /mod_base= OTHER
 FT /note= "2' methoxyethyl nucleotides"
 XX
 XX US2002058638-A1.
 XX
 PD 16-MAY-2002.
 XX
 XX 11-JUN-2001; 2001US-00878582.
 XX
 PF 21-JUL-1999; 99US-00358381.
 PR 14-DEC-1999; 99MO-US029594.
 PR 24-MAY-2000; 2000US-00577902.
 XX
 XX (MONI/) MONIA B P.
 XX (COMS/) COMSERT L M.
 XX (MCKA/) MCKAY R.
 PI Montia BP, Cowsett LM, McKay R;
 XX
 XX WPI; 2002-479187/51.
 DR
 XX
 XX New compound, preferably an antisense oligonucleotide, that hybridizes
 XX and inhibits the expression of phosphoinositide phosphatase (PTEN), for
 XX treating diseases such as diabetes, or a hyperproliferative condition.
 XX
 XX Example 15; Page 34; 39pp; English.
 PS
 XX
 XX The invention relates to antisense compounds, compositions and methods
 XX for modulating the expression of phosphoinositide phosphatase (PTEN). The
 XX antisense compound is used to inhibit the expression of PTEN in cells or
 XX tissues, preferably human, or rodent, such as mouse or rat, liver, kidney
 XX or adipose cells or tissues. It is used to treat a disease or condition
 XX associated with PTEN, such as a metabolic disease or condition,
 XX preferably diabetes, especially Type 2 diabetes, or a hyperproliferative
 XX condition. It is also used to decrease blood glucose or insulin levels in
 XX an animal, preferably a diabetic human or rodent. It is also used to
 XX inhibit expression of PEPCK in cells or tissues. It is also used to
 XX decrease insulin resistance, or increase insulin sensitivity, in an
 XX animal, preferably a diabetic human or rodent. It is used to decrease
 XX blood triglyceride or cholesterol levels in an animal, preferably a
 XX diabetic human or rodent. It is also used in antisense gene therapy. The
 XX present sequence is an antisense oligonucleotide targeted to human PTEN
 XX DNA
 SQ Sequence 18 BP; 6 A; 3 C; 2 G; 7 T; 0 U; 0 Other;
 Query Match 2.8%; Score 11.8; DB 1; Length 18;
 Best Local Similarity 86.7%; Pred. No. 5.6e+02;
 Matches 13; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
 QY 406 TCTACGTGATCAGCA 420
 DB 18 TCTACGTGATCAGCA 4
 RESULT 1180
 ABL43688/c
 ID ABL43688 standard; DNA; 18 BP.
 AC ABL43688;
 XX
 XX 11-APR-2002 (first entry)
 DT
 XX
 DE Human chromosome 1p36-35 PCR primer SEQ ID NO:732.
 XX

KM Human; chromosome 1p36-35; chromosome 21q22.1; genetic analysis; genome;
 XX PCR primer; ss.
 OS Homo sapiens.
 XX JF2001321190-A.
 PN 20-NOV-2001.
 PD 12-MAR-2001; 2001JP-00068285.
 PF 10-MAR-2000; 2000JP-00066716.
 PR (RIKA) RIKAGAKU KENKYUSHO.
 PA (GENO-) GENOTEX YG.
 XX WPI; 2002-144136/19.
 DR Arraying genome clones.
 PT Claim 4; Page 19; 528pp; Japanese.
 PS
 XX The present invention describes a method of arraying genome clones. The
 CC method comprises: (a) clones of the genomic libraries contained in
 CC multiwell plates numbered for discrimination are mixed in each of the
 CC multiwell plates; (b) a primer designed based on the chromosome marker
 CC sequence is added to the mixture to carry out an amplification reaction;
 CC (c) a signal corresponding to the marker is detected from the resultant
 CC amplified product to specify the discrimination Nos. of the multiwell
 CC plates containing the clones having said marker sequence; (d) the order
 CC of the markers is changed so that the same discrimination Nos. succeed to
 CC the maximum in the specified discrimination Nos. to array the multiwell
 CC plates; (e) the clones in the multiwell plates of the specified
 CC discrimination Nos. are mixed respectively in each well of longitudinal
 CC and lateral directions; (f) the mixed clones are cultured and the
 CC resultant cultures are amplified by using the above primer; (g) signals
 CC are detected from the amplified products; (h) the clones in the multiwell
 CC plates are specified from the detected result; and (i) the clones are
 CC reconstituted as the positions on the chromosome and arrayed. The
 CC microarray is useful for gene analysis. ABL42957 to ABL45322 represent
 CC PCR primers for human chromosome 1p36-35 DNA, and ABL45323 to ABL45634
 CC represent PCR primers for human chromosome 21q22.1, which are
 CC specifically claimed for use in the present invention
 CC
 XX Sequence 18 BP; 5 A; 7 C; 4 G; 2 T; 0 U; 0 Other;
 SQ
 XX
 Query Match 2.8%; Score 11.8; DB 1; Length 18;
 Best Local Similarity 86.7%; Pred. No. 5.6e+02;
 Matches 13; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
 QY 270 CTGGAGCAGGCGGC 284
 DB 18 CTGAGCAGCTGTGC 4
 RESULT 1181
 ABL44670
 ID ABL44670 standard; DNA; 18 BP.
 AC ABL44670;
 XX 11-APR-2002 (first entry)
 DT Human chromosome 1p36-35 PCR primer SEQ ID NO:11714.
 DE Human; chromosome 1p36-35; chromosome 21q22.1; genetic analysis; genome;
 XX PCR primer; ss.
 OS Homo sapiens.
 XX JF2001321190-A.
 PN 20-NOV-2001.
 PD

XX 12-MAR-2001; 2001JP-00068285.
 PF 10-MAR-2000; 2000JP-00066716.
 PR (RIKA) RIKAGAKU KENKYUSHO.
 PA (GENO-) GENOTEX YG.
 XX WPI; 2002-144136/19.
 DR Arraying genome clones.
 PT Claim 4; Page 38; 528pp; Japanese.
 PS
 XX The present invention describes a method of arraying genome clones. The
 CC method comprises: (a) clones of the genomic libraries contained in
 CC multiwell plates numbered for discrimination are mixed in each of the
 CC multiwell plates; (b) a primer designed based on the chromosome marker
 CC sequence is added to the mixture to carry out an amplification reaction;
 CC (c) a signal corresponding to the marker is detected from the resultant
 CC amplified product to specify the discrimination Nos. of the multiwell
 CC plates containing the clones having said marker sequence; (d) the order
 CC of the markers is changed so that the same discrimination Nos. succeed to
 CC the maximum in the specified discrimination Nos. to array the multiwell
 CC plates; (e) the clones in the multiwell plates of the specified
 CC discrimination Nos. are mixed respectively in each well of longitudinal
 CC and lateral directions; (f) the mixed clones are cultured and the
 CC resultant cultures are amplified by using the above primer; (g) signals
 CC are detected from the amplified products; (h) the clones in the multiwell
 CC plates are specified from the detected result; and (i) the clones are
 CC reconstituted as the positions on the chromosome and arrayed. The
 CC microarray is useful for gene analysis. ABL42957 to ABL45322 represent
 CC PCR primers for human chromosome 1p36-35 DNA, and ABL45323 to ABL45634
 CC represent PCR primers for human chromosome 21q22.1, which are
 CC specifically claimed for use in the present invention
 CC
 XX Sequence 18 BP; 6 A; 7 C; 4 G; 1 T; 0 U; 0 Other;
 SQ
 XX
 Query Match 2.8%; Score 11.8; DB 1; Length 18;
 Best Local Similarity 86.7%; Pred. No. 5.6e+02;
 Matches 13; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
 QY 83 CCGATGACATCAC 97
 DB 1 CACAGCGACATCAC 15
 RESULT 1182
 ABS54297
 ID ABS54297 standard; DNA; 18 BP.
 AC ABS54297;
 XX 05-DEC-2002 (first entry)
 DT Pig SOX9 cDNA, PCR primer #2.
 DE Pig; tissue repair; progenitor cell; bioreseorbable bead; chondrocyte;
 XX gel forming substance; embryonic stem cell; bone marrow stromal cell;
 XX tissue damage; articular cartilage degeneration; primary osteoarthritis;
 XX articular cartilage damage; sporting injury; tissue augmentation; trauma;
 XX cosmetic; scar; facial wrinkle; tissue growth; osteopathic;
 XX antiarthritic; dermatological; PCR; primer; ss; SOX9.
 OS Sus sp.
 XX WO200262357-A1.
 PN 15-AUG-2002.
 PD 04-FEB-2002; 2002WO-AU000106.
 PF 05-FEB-2001; 2001AU-00002896.
 PR

XX (CSIR) COMMONWEALTH SCI & IND RES ORG.
 PA (INTE-) IND TECHNOLOGY RES INST.
 XX Wertheimer JA, Tsai W, Ramshaw JM, Thiesen HW, Chang K;
 XX WPI; 2002-723146/78.
 DR WPI; 2002-723146/78.
 XX New device having tissue-like characteristics, useful for treating
 PT diseased or damaged tissue, e.g. articular cartilage degeneration
 PT associated with primary osteoarthritis, or for tissue augmentation for
 PT cosmetic purposes.
 XX
 PS Example 20; Page 18; 52pp; English.
 XX The present invention relates to methods and devices for tissue repair.
 CC The devices have tissue-like characteristics for treating diseased or
 CC damaged tissue or for augmenting tissue in a subject. The device
 CC comprises cells of type(s) normally found in healthy tissue corresponding
 CC to the diseased or damaged tissue or in the tissue to be augmented,
 CC and/or its suitable progenitor cells in association with bioresorbable
 CC beads or particles, and optionally a gel and/or gel forming substance.
 CC The cells and/or suitable progenitor cells are chondrocytes, embryonic
 CC stem cells, and/or bone marrow stromal cells. The devices and methods are
 CC useful for treating diseased or damaged tissue in a subject, such as
 CC articular cartilage degeneration associated with primary osteoarthritis,
 CC or other articular cartilage damage caused by sporting injuries or
 CC trauma. They are also useful for tissue augmentation for cosmetic
 CC purposes, e.g. treatment of scars or facial wrinkles. The present devices
 CC and methods provide treatment that is less traumatic than previous art.
 CC The use of biodegradable polymers in the device offer advantages over non
 CC -degradable polymers in that their gradual degradation steadily creates
 CC room for tissue growth and eliminate the need for surgical removal of the
 CC scaffolds following restoration of the articular cartilage. Another
 CC advantage is its ability to be administered by injection if desired. The
 CC beads or particles provide mechanical and space-filling benefits while
 CC tissue regeneration is progressing, by offering physical support and
 CC resistance to compression. The present sequence represents a PCR primer
 CC used to amplify pig SOX9 cDNA, in the examples of the present invention
 CC
 SQ Sequence 18 BP; 4 A; 6 C; 4 G; 4 T; 0 U; 0 Other;
 Query Match 2.8%; Score 11.8; DB 1; Length 18;
 Best Local Similarity 86.7%; Pred. No. 5.6e+02;
 Matches 13; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
 QY 88 TGGACATCACACGCT 102
 DB 3 TGGACATCACACGCT 17
 RESULT 1183
 ABT04711/C
 ID ABT04711 standard; DNA; 18 BP.
 XX
 AC ABT04711;
 XX
 DT 27-SEP-2002 (first entry)
 XX
 DE End-labelled probe array production method-related oligonucleotide 18.
 XX
 KW End-labelled probe array production; probe; ss; target substance capture.
 XX
 OS Unidentified.
 XX
 PS JP2002153284-A.
 XX
 PD 28-MAY-2002.
 XX
 PF 24-NOV-2000; 2000JP-00357446.
 XX
 PR 24-NOV-2000; 2000JP-00357446.
 XX

PA (CANO) CANON KK.
 XX WPI; 2002-552742/59.
 XX Preparation of an end-labelled probe array, for capturing a target
 PT substance.
 PT
 XX Example 1; Page 5; 25pp; Japanese.
 XX The invention comprises a method for the synthesis of an end-labelled
 CC probe array - in which part of a probe for capturing a target substance
 CC is fixed at a plural of the matrix sites on the surface of a probe array
 CC substrate, in the method of the invention the units for constituting the
 CC probe are combined successively and, at the final stage of the successive
 CC synthesis, a labelling substance is combined to the end of the probe and
 CC extended to a desired chain length. The method of the invention is useful
 CC for the production of a probe array. The present DNA sequence represents
 CC an oligonucleotide that was used in an example of the invention
 CC
 SQ Sequence 18 BP; 3 A; 3 C; 7 G; 5 T; 0 U; 0 Other;
 Query Match 2.8%; Score 11.8; DB 1; Length 18;
 Best Local Similarity 86.7%; Pred. No. 5.6e+02;
 Matches 13; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
 QY 297 AAGACCTGAGCCCC 311
 DB 18 ATGACCTGAGCCCC 4
 RESULT 1184
 AB13386/C
 ID AB13386 standard; DNA; 18 BP.
 XX
 AC AB13386;
 XX
 DT 21-MAR-2002 (first entry)
 XX
 DE Human HLA genotyping oligonucleotide SEQ ID NO 877.
 XX
 KW Human; human leukocyte antigen; HLA; genotype; polymorphism;
 KW immunogenetic; transplantation; genetic disease; ss.
 XX
 OS Homo sapiens.
 XX
 PN WO200192572-A1.
 XX
 PD 06-DEC-2001.
 XX
 PF 01-JUN-2001; 2001WO-JP004662.
 XX
 PR 01-JUN-2000; 2000JP-00164798.
 XX
 PA (NIN) NISSHINBO IND INC.
 XX (SYST-) SYSTEM RES INC.
 XX
 PI Inoko H, Kagiya T, Ichihara T, Matsumura Y, Moriya S, Nishida M;
 XX WPI; 2002-122074/16.
 DR WPI; 2002-122074/16.
 XX Human leukocyte antigen (HLA) typing, useful for judging HLA genotypes of
 PT individuals e.g. by determining immunogenetic differences when
 PT transplanting between them.
 PT
 PS Claim 10; Page 259; 345pp; Japanese.
 XX The invention relates to a typing kit for judging human leukocyte antigen
 CC (HLA) genotype of a sample by hybridising a substrate on which 10-24 base
 CC oligonucleotides (AB130512-AB131809) originating in the sequences of
 CC genes e.g. belonging to HLA class I antigens on human genome and
 CC containing gene polymorphisms as all antigens have been immobilised as
 CC primers for amplification of cleaved nucleic acids relating to gene
 CC polymorphisms. The method is useful for judging HLA genotypes of

CC individuals by determining immunogenetic differences before transplanting
 CC between them, providing genetic information to decide compatibility of
 CC organ and tissue for transplantation e.g. of bone marrow, kidney, liver,
 CC pancreas, Langerhans islet in pancreas and cornea, susceptibility
 CC diagnosis of genetic diseases and identifying individuals
 XX

SO Sequence 18 BP; 5 A; 5 C; 5 G; 3 T; 0 U; 0 Other;

Query Match 2.8%; Score 11.8; DB 1; Length 18;
 Best Local Similarity 86.7%; Pred. No. 5.6e+02;
 Matches 13; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 394 CCAAGAGCTCTCT 408
 DB 16 CCAAGAGCTCTCT 2

RESULT 1185
 ABL59653/c
 ID ABL59653 standard; DNA; 18 BP.

AC ABL59653;

DT 18-JUL-2002 (first entry)

DE Oligonucleotide probe SEQ ID NO:18.

KW Simultaneous determination; probe; ss.

OS Synthetic.

PN JP2002065299-A.

PD 05-MAR-2002.

PF 31-AUG-2000; 2000JP-00263505.

PR 31-AUG-2000; 2000JP-00263505.

PA (CANO) CANON KK.

DR WPI; 2002-398978/43.

PT Simultaneous testing of the reactivity of a sample with other different
 PT samples, comprises applying to the two samples to a substrate comprising
 PT divided matrices.

PS Example 1; Page 11; 24pp; Japanese.

CC The present invention describes a method for determining simultaneously
 CC the reactivity of a first sample with other samples, in which the second
 CC to the 2 plus n-th (n is not less than 1) samples having different
 CC properties are arranged independently on a substrate, on whose surface
 CC the first sample is already present, and the reactivities between the
 CC first sample and each of the second to the 2 plus n-th samples are
 CC determined. Also described is a tissue sample matrix in which several
 CC samples from different sources are present on each matrix divided on a
 CC substrate. The method is used for determining simultaneously the
 CC reactivity of a first sample with several other differing samples.
 CC ABL59636 to ABL59701 represent oligonucleotide probes used in an example
 CC from the present invention

SO Sequence 18 BP; 3 A; 3 C; 7 G; 5 T; 0 U; 0 Other;

Query Match 2.8%; Score 11.8; DB 1; Length 18;
 Best Local Similarity 86.7%; Pred. No. 5.6e+02;
 Matches 13; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 297 AAGGACCTGAGCCCC 311
 DB 18 ATGAACTGAGCCCC 4

RESULT 1186
 ABL06232/c
 ID ABL06232 standard; DNA; 18 BP.

AC ABL06232;

DT 24-OCT-2002 (first entry)

DE Synthetic DNA selling system - related oligonucleotide 37.

KW synthetic DNA selling system; internet; ss; purchase order menu;
 KW major histocompatibility complex; MHC.

OS Synthetic.

PN JP2002074069-A.

PD 12-MAR-2002.

PF 29-AUG-2000; 2000JP-00259715.

PR 29-AUG-2000; 2000JP-00259715.

PA (CANO) CANON KK.

DR WPI; 2002-492955/53.

PT Synthetic DNA selling system using the Internet, displays purchase order
 PT menu to orderer's terminal and initiates production of selected DNA for
 PT the successful bidder.

PS Disclosure; Fig 5; 22pp; Japanese.

CC The invention comprises a synthetic DNA selling system using the
 CC internet. The system displays a purchase order menu display, with the
 CC number of base sequences of DNA from which the orderer selects a DNA. The
 CC order information is transmitted to a successful bidder side server which
 CC orders for production and delivery of selected synthetic DNA. The system
 CC of the invention is useful for marketing synthetic DNAs of different base
 CC sequences and concentrations according to the desire of the user.
 CC especially genes concerned with human major histocompatibility complex
 CC (MHC). Oligonucleotides ABL06196 - ABL06278 are used in the invention

SO Sequence 18 BP; 3 A; 3 C; 7 G; 5 T; 0 U; 0 Other;

Query Match 2.8%; Score 11.8; DB 1; Length 18;
 Best Local Similarity 86.7%; Pred. No. 5.6e+02;
 Matches 13; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 297 AAGGACCTGAGCCCC 311
 DB 18 ATGAACTGAGCCCC 4

RESULT 1187
 ABL298176/c
 ID ABL298176 standard; DNA; 18 BP.

AC ABL298176;

DT 17-OCT-2003 (first entry)

DE Human CD23 + A1261 oligonucleotide sequence.

KW Human; anti-sense; lung dysfunction; nasal airway dysfunction;
 KW anti-inflammatory steroid; ubiquinone; anti-inflammatory; anti-allergic;
 KW antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy;
 KW adenosine gene therapy; respiratory; lung; adenosine sensitivity;
 KW adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;
 KW lung inflammation; respiratory disease; ds.

OS Homo sapiens.

OS Synthetic.
 XX WO2003016500-A2.
 XX 27-FEB-2003.
 PD
 XX 16-AUG-2002; 2002WO-US026514.
 PF 16-AUG-2001; 2001US-0313080P.
 XX
 XX (PHAS-) PHASE-1 MOLECULAR TOXICOLOGY INC.
 PA Neft RE, Dunn RT, Adkins K, Pickett GG, Klier LD, Schweizer K;
 PI Alen P;
 XX WPI; 2003-268322/26.
 DR
 XX Determining a toxicological response to an agent, useful for screening of
 PT drugs, comprises comparing the expression profile of one or more human
 PT toxic response genes to a reference gene expression profile indicative of
 PT toxicity.
 XX
 XX Claim 1; Page 332; 455pp; English.
 PS
 XX The present invention describes a method (M1) for determining a
 CC toxicological response to an agent, which comprises comparing the
 CC expression profile of one or more human toxic response genes to a
 CC reference gene expression profile indicative of toxicity, and so
 CC determining the presence of a toxic response to the agent. Also
 CC described: (1) an array comprising one or more polynucleotides selected
 CC from the genes corresponding to the partial sequences given in AB282842
 CC to AB284764, or their fragments of at least 20 nucleotides; or homologues
 CC ; and (2) determining if a gene putatively identified to be a toxic
 CC response gene plays a role on toxic response pathways by determining the
 CC expression profile of the gene after exposure of cells or a human subject
 CC to a known toxic pharmaceutical or industrial agent, comprising: (a)
 CC exposing cells to an agent; (b) obtaining the test gene expression profile
 CC for a putatively identified toxic response gene after exposure to a known
 CC toxic pharmaceutical or industrial agent; and (c) comparing the test
 CC profile to the expression profile of a gene with a similar function or
 CC comparing the test profile to the expression profile of that gene after
 CC exposure to other known toxic compounds. The methods are useful for
 CC predicting and determining toxicological responses on a cellular, organ
 CC or system level. The arrays comprising the human genes are useful for
 CC toxicological screening of drugs, pharmaceutical compounds and chemicals
 XX
 SO Sequence 18 BP; 2 A; 5 C; 7 G; 4 T; 0 U; 0 Other;
 Query Match 2.8%; Score 11.8; DB 1; Length 18;
 Best Local Similarity 86.7%; Pred. No. 5.6e+02;
 Matches 13; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
 QY 20 GGTGACGAGGCGCTG 34
 Db 3 GCTGACTGAGGCGCTG 17
 RESULT 1190
 AB284057
 ID AB284057 standard; DNA; 18 BP.
 XX
 XX AB284057;
 AC
 XX 14-MAY-2003 (first entry)
 DT
 XX Toxicologically relevant rat PCR primer #1216.
 DE
 XX Toxicologically relevant gene; toxicological response; PCR primer; ss.
 KW
 XX Rattus sp.
 OS
 XX Synthetic.

PN WO2003016500-A2.
 XX 27-FEB-2003.
 PD
 XX 16-AUG-2002; 2002WO-US026514.
 PF 16-AUG-2001; 2001US-0313080P.
 XX
 XX (PHAS-) PHASE-1 MOLECULAR TOXICOLOGY INC.
 PA Neft RE, Dunn RT, Adkins K, Pickett GG, Klier LD, Schweizer K;
 PI Alen P;
 XX WPI; 2003-268322/26.
 DR
 XX Determining a toxicological response to an agent, useful for screening of
 PT drugs, comprises comparing the expression profile of one or more human
 PT toxic response genes to a reference gene expression profile indicative of
 PT toxicity.
 XX
 XX Claim 1; Page 325; 455pp; English.
 PS
 XX The present invention describes a method (M1) for determining a
 CC toxicological response to an agent, which comprises comparing the
 CC expression profile of one or more human toxic response genes to a
 CC reference gene expression profile indicative of toxicity, and so
 CC determining the presence of a toxic response to the agent. Also
 CC described: (1) an array comprising one or more polynucleotides selected
 CC from the genes corresponding to the partial sequences given in AB282842
 CC to AB284764, or their fragments of at least 20 nucleotides; or homologues
 CC ; and (2) determining if a gene putatively identified to be a toxic
 CC response gene plays a role on toxic response pathways by determining the
 CC expression profile of the gene after exposure of cells or a human subject
 CC to a known toxic pharmaceutical or industrial agent, comprising: (a)
 CC exposing cells to an agent; (b) obtaining the test gene expression profile
 CC for a putatively identified toxic response gene after exposure to a known
 CC toxic pharmaceutical or industrial agent; and (c) comparing the test
 CC profile to the expression profile of a gene with a similar function or
 CC comparing the test profile to the expression profile of that gene after
 CC exposure to other known toxic compounds. The methods are useful for
 CC predicting and determining toxicological responses on a cellular, organ
 CC or system level. The arrays comprising the human genes are useful for
 CC toxicological screening of drugs, pharmaceutical compounds and chemicals
 XX
 SO Sequence 18 BP; 3 A; 6 C; 5 G; 4 T; 0 U; 0 Other;
 Query Match 2.8%; Score 11.8; DB 1; Length 18;
 Best Local Similarity 86.7%; Pred. No. 5.6e+02;
 Matches 13; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
 QY 267 CACTGTGAGCAGGCGC 281
 Db 4 CACTGTGAGCAGGCGC 18
 RESULT 1191
 AB556993
 ID AB556993 standard; DNA; 18 BP.
 XX
 XX AB556993;
 AC
 XX 29-JUN-2003 (first entry)
 DT
 XX Implantation serine proteinase 1 (ISP1) RT-PCR primer #2.
 DE
 XX Implantation serine proteinase 1; ISP1; female infertility; gene therapy;
 KW
 XX Implantation; reverse transcriptase PCR; RT-PCR; primer; ss.
 OS
 XX Synthetic.
 XX WO200281665-A2.

PD 17-OCT-2002.
 XX 08-APR-2002; 2002WO-CA000474.
 PF
 XX 06-APR-2001; 2001US-0281724P.
 PR 30-MAY-2001; 2001US-0294736P.
 PR 25-JAN-2002; 2002US-0350962P.
 XX
 PA (RANC/) RANCOURT D E.
 PA (RANC/) RANCOURT S L.
 PA (OSUL/) O'SULLIVAN C M.
 XX
 PI Rancourt DE, Rancourt SL, O'Sullivan CM;
 DR WPI; 2003-058536/05.
 XX
 XX New purified Implantation Serine Proteinase protein for diagnosing,
 PT treating or ameliorating female infertility by modulating the process of
 PT hatching and implantation of the embryo.
 XX
 PS Example; Page 40; 85pp; English.
 CC The invention describes a purified Implantation Serine Proteinase (ISP)
 CC protein. The ISP protein is useful in diagnosing, treating or
 CC ameliorating female infertility (e.g. using gene therapy), particularly
 CC by modulating the process of hatching and implantation of the embryo. The
 CC ISP protein inhibitor is useful as contraception. This sequence
 CC represents a reverse transcriptase PCR primer used to isolate DNA
 CC encoding implantation serine proteinase 1 (ISP1) from embryo and
 CC placental tissue
 XX
 SQ Sequence 18 BP; 6 A; 5 C; 5 G; 2 T; 0 U; 0 Other;
 Query Match 2.8%; Score 11.8; DB 1; Length 18;
 Best Local Similarity 86.7%; Pred. No. 5.6e+02;
 Matches 13; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
 QY 36 GACGAAGATGGCCAC 50
 Db 1 GTCAAGATGCCAC 15
 RESULT 1192
 AAD52135
 ID AAD52135 standard; DNA; 18 BP.
 XX
 AC AAD52135;
 XX
 DT 02-MAY-2003 (first entry)
 XX
 DE Xanthomonas citri AEH DNA specific primer #3.
 XX
 KM Alpha-amino ester hydrolase; AEH; beta-lactam antibiotic; enzyme;
 KM EC 3.1.1.43; primer; ss.
 XX
 OS Xanthomonas citri.
 XX
 PN WO200286111-A2.
 XX
 PD 31-OCT-2002.
 XX
 PF 24-APR-2002; 2002WO-EP004536.
 PR 25-APR-2001; 2001US-0286766P.
 XX
 PA (STAM) DSM NV.
 XX
 PI Van Der Laan JM, Foldersman-Tijmes JJ, Barends TRM;
 DR WPI; 2003-103410/09.
 XX
 PT Novel recombinantly produced alpha-amino ester hydrolase protein useful
 PT in the production of beta-lactam antibiotics.

XX Example 3; Page 43; 134pp; English.
 PS
 XX The present invention relates to alpha-amino ester hydrolase (AEH; alpha-
 CC AEH; EC 3.1.1.43) proteins and polynucleotides encoding such proteins.
 CC Sequences of the invention are useful in the production of beta-lactam
 CC antibiotics. The present sequence is Xanthomonas citri AEH DNA specific
 CC primer. This sequence is used in the exemplification of the invention
 XX
 SQ Sequence 18 BP; 4 A; 7 C; 5 G; 2 T; 0 U; 0 Other;
 Query Match 2.8%; Score 11.8; DB 1; Length 18;
 Best Local Similarity 86.7%; Pred. No. 5.6e+02;
 Matches 13; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
 QY 24 ACCGAGGCTGGGAC 38
 Db 1 ACCGATGCTGGGAC 15
 RESULT 1193
 ACD99950/C
 ID ACD99950 standard; DNA; 18 BP.
 XX
 AC ACD99950;
 XX
 DT 25-SEP-2003 (first entry)
 XX
 DE Immunostimulatory nucleic acid #636.
 XX
 KM Immunostimulatory; anti-inflammatory; dermatological; antipsoriatic;
 KM anticancer; gene therapy; vaccine; non-allergic inflammatory diseases;
 KM psoriasis; eczema; allergic contact dermatitis; latex dermatitis;
 KM inflammatory bowel disease; ulcerative colitis; Crohn's disease; ss.
 XX
 OS Synthetic.
 XX
 PN US2003050268-A1.
 XX
 PD 13-MAR-2003.
 XX
 PF 29-MAR-2002; 2002US-00112653.
 XX
 PR 29-MAR-2001; 2001US-0279642P.
 XX
 PA (KRIE/) KRIEG A M.
 PA (BERG/) BERG D J.
 XX
 PI Krieg AM, Berg DJ;
 XX
 DR WPI; 2003-521815/49.
 XX
 PT Treating non-allergic inflammatory diseases, such as psoriasis, eczema,
 PT allergic contact dermatitis, latex dermatitis or inflammatory bowel
 PT disease by administering an immunostimulatory nucleic acid.
 XX
 PS Disclosure; Page 26; 229pp; English.
 XX
 CC The invention describes a method of treating non-allergic inflammatory
 CC disease comprising administering to a subject having or at risk of
 CC developing a non-allergic inflammatory disease an immunostimulatory
 CC nucleic acid for prevention or treatment of the disease. The method is
 CC useful for treating non-allergic inflammatory diseases, such as
 CC psoriasis, eczema, allergic contact dermatitis, latex dermatitis or
 CC inflammatory bowel disease e.g., ulcerative colitis or Crohn's disease.
 CC This sequence represents an immunostimulatory nucleic acid
 XX
 SQ Sequence 18 BP; 0 A; 6 C; 9 G; 3 T; 0 U; 0 Other;
 Query Match 2.8%; Score 11.8; DB 1; Length 18;
 Best Local Similarity 86.7%; Pred. No. 5.6e+02;
 Matches 13; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 379 ACCGCGACGAGCGG 393
 DB 15 ACCGCGCGGACGCG 1

RESULT 1194
 AAD58047/c
 ID AAD58047 standard; DNA, 18 BP.
 AC AAD58047;
 XX
 DT 20-NOV-2003 (first entry)
 XX
 DE Dehalococcoides family A group 16S rDNA amplifying primer, RpdhCAO1213.
 XX
 KW 16S rDNA; dechlorinating bacterial organism; PCR; primer; ss.
 XX
 OS Dehalococcoides sp.
 XX
 PN WO2003064695-A1.
 XX
 PD 07-AUG-2003.
 XX
 PF 30-JAN-2002; 2002WO-US003927.
 XX
 PR 30-JAN-2002; 2002WO-US003927.
 XX
 PA (DUPO) DU PONT DE NEMOURS & CO E. I.
 XX
 PI Ebersole R, Hendrickson E;
 XX
 DR WPI; 2003-636804/60.
 XX
 PT Novel isolated 16S rDNA sequence useful for forming probes and primers
 PT which are useful for identifying dechlorinating bacterial organism in
 PT various samples.
 XX
 PS Claim 2; Page 52; 110pp; English.

CC The invention relates to an isolated 16S rDNA sequence indicative of a
 CC dechlorinating bacterial organism. The invention is useful for forming
 CC probes and primers which are useful for identifying dechlorinating
 CC bacterial organism in various samples. The method of the invention is
 CC useful for identifying a dechlorinating bacterial organism that is a
 CC member of a cell population or consortium. The isolated bacterial
 CC organism is useful for dechlorinating chlorinated compounds which
 CC involves contacting a chlorinated compound with the organism.
 CC Oligonucleotide polymer of the invention is useful for separating sub-
 CC families of dechlorinating bacterial organism. The present sequence is
 CC Dehalorespiring bacteria 16S rDNA amplifying PCR primer
 XX

SQ Sequence 18 BP; 1 A; 8 C; 6 G; 3 T; 0 U; 0 Other;

Query Match 2.8%; Score 11.8; DB 1; Length 18;
 Best Local Similarity 86.7%; Pred. No. 5.6e+02;
 Matches 13; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 18 CGGCTGACCGGAGC 32
 DB 15 CGGCTGACCGGAGC 1

RESULT 1195
 ACP05368/c
 ID ACP05368 standard; DNA, 18 BP.
 AC ACP05368;
 XX
 DT 06-NOV-2003 (first entry)
 XX
 DE Thermus igniterrae nucleic acid polymerase PCR primer.
 XX
 KW Nucleic acid polymerase; enzyme; strand displacement amplification; PCR;
 XX

KW primer extension; PCR; primer; ss.
 XX
 OS Thermus spp.
 XX
 PN WO2003048307-A2.
 XX
 PD 12-JUN-2003.
 XX
 PF 22-NOV-2002; 2002WO-US037650.
 XX
 PR 30-NOV-2001; 2001US-0334435P.
 XX
 PA (APPL-) APPLERA CORP.
 XX
 PI Rozzelle J, Bolchakova E;
 XX
 DR WPI; 2003-513746/48.
 XX
 PT New isolated Thermus igniterrae nucleic acid polymerases and nucleic
 PT acids encoding the polymerases, useful for DNA synthesis, primer
 PT extension, DNA sequencing, reverse transcription, or DNA and RNA
 PT amplification procedures.
 XX
 PS Example 1; Page 47; 67pp; English.

CC The present sequence is that of a PCR primer based on a conserved region
 CC of Thermus aquaticus, Thermus thermophilus, Thermus filiformis, Thermus
 CC caldophilus and Thermus flavus nucleic acid polymerases. It was used as C
 CC terminal primer with the N-terminal primer given in ACP05367, in a PCR
 CC amplification of Thermus igniterrae strain ID RF-4 (ATCC 700962) DNA. A
 CC gene fragment was obtained, and subsequent PCRs yielded a full-length
 CC coding sequence (see ACP05363) for T. igniterrae nucleic acid polymerase.
 CC The invention provides nucleic acid polymerase polynucleotides, vectors,
 CC host cells and polypeptides, including mutants having reduced 5'-3',
 CC exonuclease activity and/or reduced bias against ddNTP incorporation. The
 CC wild-type and mutant enzymes are used in claimed methods for thermocyclic
 CC nucleic acid amplification, especially strand displacement amplification
 CC or PCR, and for primer extension
 XX

SQ Sequence 18 BP; 3 A; 9 C; 4 G; 2 T; 0 U; 0 Other;

Query Match 2.8%; Score 11.8; DB 1; Length 18;
 Best Local Similarity 86.7%; Pred. No. 5.6e+02;
 Matches 13; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 138 CGCCTGCGCGTGGAG 152
 DB 15 CCCCTGGAGGTGGAG 1

RESULT 1196
 ADA50410/c
 ID ADA50410 standard; DNA, 18 BP.
 AC ADA50410;
 XX
 DT 20-NOV-2003 (first entry)
 XX
 DE Thermus scotoductus nucleic acid polymerase PCR primer SEQ ID NO:35.
 XX
 KW nucleic acid polymerase; enzyme; Thermus scotoductus; DNA polymerase;
 KW salt tolerance; thermostability; PCR primer; ss.
 XX
 OS Synthetic.
 OS Thermus scotoductus.
 XX
 PN WO2003066804-A2.
 XX
 PD 14-AUG-2003.
 XX
 PF 13-SEP-2002; 2002WO-US029102.
 XX
 PR 14-SEP-2001; 2001US-0322218P.

PR 30-NOV-2001; 2001US-0334489P.
 XX (APPL-) APPLERA CORP.
 PA (BOLC/) BOLCHAKOVA E V.
 PA (ROZZ/) ROZZELLE J E.
 XX
 PI Bolchakova EV, Rozzelle JE;
 DR WPI; 2003-663590/62.
 XX
 PT New nucleic acid encoding a Thermus scotoductus strain X-1, ATCC Deposit
 PT No. 27978 nucleic acid polymerase, useful for producing nucleic acid
 PT polymerases having e.g., improved sequence discrimination or better salt
 PT tolerance.
 XX
 PS Example 1; Page 80; 179pp; English.
 XX
 CC The present invention describes isolated nucleic acids encoding nucleic
 CC acid polymerases from Thermus scotoductus. Also described: (1) an
 CC isolated nucleic acid (1) encoding a nucleic acid polymerase from Thermus
 CC scotoductus strain X-1, ATCC Deposit No. 27978; (2) an isolated DNA
 CC polymerase polypeptide from Thermus scotoductus strain X-1, ATCC Deposit
 CC No. 27978; (3) an isolated nucleic acid (11) comprising any of a set of
 CC 12 nucleic acid sequences (S1, see ADA50425 to ADA50436) which encodes a
 CC nucleic acid polymerase; (4) an isolated nucleic acid (111) encoding a
 CC nucleic acid polymerase comprising any of a set of 16 amino acid
 CC sequences (S2, see ADA50389 to ADA50404); (5) isolated nucleic acid
 CC polymerases comprising any of amino acid sequences S2; (6) vectors
 CC comprising (1), (11), or (111), and especially expression vectors in
 CC which the nucleic acid polymerase gene is operably linked to a promoter;
 CC (7) a host cell comprising an isolated nucleic acid molecule encoding a
 CC nucleic acid polymerase from Thermus scotoductus strain X-1, ATCC Deposit
 CC No. 27978; (8) a host cell comprising (1) or (11); (9) a kit comprising a
 CC container containing a nucleic acid polymerase comprising any of amino
 CC acid sequences S2; (10) preparing (M1) a nucleic acid polymerase
 CC comprising any of amino acid sequences S2 by incubating a host cell
 CC comprising an encoding nucleic acid under conditions sufficient for RNA
 CC transcription and translation; (11) a nucleic acid polymerase prepared by
 CC M1; (12) synthesizing DNA (M2) comprising contacting a polypeptide
 CC comprising any of amino acid sequences S2 with a DNA under conditions
 CC sufficient to permit DNA polymerization; (13) a method (M3) for
 CC thermocyclic amplification of nucleic acid; and (14) a method (M4) of
 CC primer extension. The nucleic acid is useful for producing nucleic acid
 CC polymerases having improved sequence discrimination, better salt
 CC tolerance or varying degrees of thermostability with applications e.g. in
 CC PCR and DNA sequencing. The present sequence represents a PCR primer for
 CC Thermus scotoductus nucleic acid polymerase, which is used in an example
 CC from the present invention.
 XX
 SQ Sequence 18 BP; 3 A; 9 C; 4 G; 2 T; 0 U; 0 Other;
 XX
 QY Query Match 2.8%; Score 11.8; DB 1; Length 18;
 Best Local Similarity 86.7%; Pred. No. 5.6e+02;
 Matches 13; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
 138 CGCCTGAGCGGTGAG 152
 15 CCCCTGAGGTGAG 1
 DB
 RESULT 1197
 ADB36986/c
 ID ADB36986 standard; DNA; 18 BP.
 XX
 AC ADB36986;
 XX
 DT 04-DEC-2003 (first entry)
 XX
 DE Immunostimulatory nucleic acid #600.
 XX
 KM de; allergy; asthma; poly-G nucleic acid; aerosol formulation;
 KM hypo-responsive subject; immunostimulatory.
 XX

OS Synthetic.
 XX
 PN US2003087848-A1.
 XX
 PD 08-MAY-2003.
 XX
 PF 02-FEB-2001; 2001US-0076479.
 XX
 PR 03-FEB-2000; 2000US-0179991P.
 XX
 PA (BRAT/) BRATZLER R L.
 PA (PETE/) PETERSEN D M.
 PA (FOUR/) FOURON Y.
 XX
 PI Bratzler RL, Petersen DM, Fouron Y;
 DR WPI; 2003-657977/62.
 XX
 PT Treating and/or preventing allergy or asthma using an immunostimulatory
 PT nucleic acid alone or in combination with an asthma/allergy medicament.
 XX
 PS Disclosure; Page 14; 221pp; English.
 XX
 CC The invention relates to a method of treating or preventing allergy or
 CC asthma which comprises administering to a subject a poly-G nucleic acid
 CC in an aerosol formulation. The methods and compositions of the present
 CC invention are useful for diagnosing and/or treating asthma and allergy
 CC especially in a hypo-responsive subject. The present sequence represents
 CC an immunostimulatory nucleic acid of the invention.
 XX
 SQ Sequence 18 BP; 0 A; 6 C; 9 G; 3 T; 0 U; 0 Other;
 XX
 QY Query Match 2.8%; Score 11.8; DB 1; Length 18;
 Best Local Similarity 86.7%; Pred. No. 5.6e+02;
 Matches 13; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
 379 ACCGCGACGACGCGG 393
 15 ACCGCGCGACGCGG 1
 DB
 RESULT 1198
 ADC99372/c
 ID ADC99372 standard; DNA; 18 BP.
 XX
 AC ADC99372;
 XX
 DT 01-JAN-2004 (first entry)
 XX
 DE PAMA forward PCR primer - SEQ ID 205.
 XX
 KM cytosstatic; cancer; gene therapy; DGI-2; DGI-5; DGI-7; DGI-9; Hras;
 KM lepin; VEGF; vascular endothelial growth factor receptor; VEGF-R1;
 KM VEGF-R2; VEGF-R3; FUR1; FMS-related tyrosine kinase 1; FLK1; KDR;
 KM kinase insert domain protein receptor; EGFR; epidermal growth factor;
 KM FGFR1; fibroblast growth factor; Tie-1; PCR; ss; primer.
 XX
 OS Unidentified.
 XX
 PN WO2003035839-A2.
 XX
 PD 01-MAY-2003.
 XX
 PF 24-OCT-2002; 2002WO-US034021.
 XX
 PR 24-OCT-2001; 2001US-0345471P.
 XX
 PA (DGI-) DGI BIOTECHNOLOGIES INC.
 XX
 PI Pillutia RC, Brissette R, Spruyt M, Dedova O, Blume A;
 PI Prendergast J, Goldstein N;
 DR WPI; 2003-457332/43.

```

XX Selecting target and target binder pairs for preparing a composition for
PT treating cancer by mixing in a reaction vessel phage expressing
PT biological targets and phage expressing target binders.
XX
XX Example 18; SEQ ID NO 205; 172pp; English.
XX
CC The invention relates to a novel method of selecting target and target
CC binder pairs comprising mixing in a reaction vessel phage expressing
CC biological targets and phage expressing target binders, each having
CC distinguishable selection markers and selecting target and target binder
CC pairs based on the selection markers. The molecules of the invention
CC demonstrate cytostatic activity whilst the method may be useful for
CC selecting target and target binder pairs for preparing a composition for
CC treating cancer. Furthermore, the method may be utilised during gene
CC therapy procedures. The current sequence is that of the PCR primer of the
CC invention.
XX
SQ Sequence 18 BP; 2 A; 9 C; 6 G; 1 T; 0 U; 0 Other;
XX
Query Match 2.8%; Score 11.8; DB 1; Length 18;
Best Local Similarity 86.7%; Pred. No. 5.6e+02;
Matches 13; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
XX
QY 336 GACCAAGGCGCGCTG 350
DB 18 GGCATGCGCGCTG 4
XX
RESULT 1199
ABH21732
ID ABH21732 standard; DNA; 13 BP.
AC ABH21732;
XX
XX 22-FEB-2002 (first entry)
XX
DE Oligonucleotide SEQ ID NO 221709 for detecting SNP TSC0053962.
XX
XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX Homo sapiens.
XX
XX WO200177384-A2.
XX
XX 18-OCT-2001.
XX
XX 06-APR-2001; 2001WO-IB000713.
XX
XX 07-APR-2000; 2000DE-01019173.
XX
XX (EPIC-) EPIGENOMICS AG.
XX
XX Olek A, Piepenbrock C, Berlin K;
XX
XX WPI; 2001-657177/75.
XX
XX Set of oligonucleotides, useful for diagnosis and cell typing, is
XX designed to detect single-nucleotide polymorphisms and cytosine
XX methylation status.
XX
XX Claim 1; SEQ ID NO 221709; 29pp + Sequence Listing; German.
XX
XX This invention describes novel oligonucleotide primers or peptide nucleic
XX acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
XX and cytosine methylation status in chemically pretreated genomic DNA. The
XX oligonucleotides are used for diagnosis and/or prognosis of cancer and a
XX range of diseases including immune system, gastrointestinal, respiratory,
XX central nervous system, cardiovascular and metabolic disorders. The
XX oligomers are also used for detecting cell type differentiation. ABC00010
XX -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
XX -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073

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CC represent the oligomers described in the invention. NOTE: The sequence
CC data for this patent did not form part of the printed specification, but
CC was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences
XX
XX Sequence 13 BP; 4 A; 1 C; 6 G; 1 T; 0 U; 1 Other;
XX
XX Query Match 2.7%; Score 11.6; DB 1; Length 13;
XX Best Local Similarity 91.7%; Pred. No. 3.1e+02;
XX Matches 11; Conservative 1; Mismatches 0; Indels 0; Gaps 0;
XX
XX QY 231 AAATCGGAGGC 242
XX DB 2 AAATCGGAGG 13
XX
XX RESULT 1200
XX ABH21733/C
XX ID ABH21733 standard; DNA; 13 BP.
XX
XX ABH21733;
XX
XX 22-FEB-2002 (first entry)
XX
XX Oligonucleotide SEQ ID NO 221710 for detecting SNP TSC0053962.
XX
XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX Homo sapiens.
XX
XX WO200177384-A2.
XX
XX 18-OCT-2001.
XX
XX 06-APR-2001; 2001WO-IB000713.
XX
XX 07-APR-2000; 2000DE-01019173.
XX
XX (EPIC-) EPIGENOMICS AG.
XX
XX Olek A, Piepenbrock C, Berlin K;
XX
XX WPI; 2001-657177/75.
XX
XX Set of oligonucleotides, useful for diagnosis and cell typing, is
XX designed to detect single-nucleotide polymorphisms and cytosine
XX methylation status.
XX
XX Claim 1; SEQ ID NO 221710; 29pp + Sequence Listing; German.
XX
XX This invention describes novel oligonucleotide primers or peptide nucleic
XX acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
XX and cytosine methylation status in chemically pretreated genomic DNA. The
XX oligonucleotides are used for diagnosis and/or prognosis of cancer and a
XX range of diseases including immune system, gastrointestinal, respiratory,
XX central nervous system, cardiovascular and metabolic disorders. The
XX oligomers are also used for detecting cell type differentiation. ABC00010
XX -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
XX represent the oligomers described in the invention. NOTE: The sequence
XX data for this patent did not form part of the printed specification, but
XX was obtained in electronic format from WIPO at
XX ftp.wipo.int/pub/published_pct_sequences
XX
XX Sequence 13 BP; 1 A; 6 C; 1 G; 4 T; 0 U; 1 Other;
XX
XX Query Match 2.7%; Score 11.6; DB 1; Length 13;
XX Best Local Similarity 91.7%; Pred. No. 3.1e+02;
XX Matches 11; Conservative 1; Mismatches 0; Indels 0; Gaps 0;
XX
XX QY 231 AAATCGGAGGC 242
XX

```

DB 12 AATCGGAGGY 1

RESULT 1201

AAS98785 AAS98785 standard; DNA; 15 BP.

AC AAS98785;

DT 26-MAR-2002 (first entry)

DE Colony stimulating factor 1 receptor (CSF1R) oligonucleotide #151.

XX Colony stimulating factor 1 receptor; CSF1R; polymorphic variant;

XX cytostatic; gene therapy; malignant histiocytosis; isogene; haplotype;

XX myeloid malignancy; inflammatory disorder; transgenic animal; primer; ss.

XX genotype; human; allele specific oligonucleotide; ASO; primer; ss.

XX Homo sapiens.

XX WO200179225-A2.

XX 25-OCT-2001.

XX 12-APR-2001; 2001WO-US012044.

XX 12-APR-2000; 2000US-0196411P.

XX (GENA-) GENA15555 PHARM INC.

XX Chew A, Choi JY, Koshy B;

XX WPI; 2002-075058/10.

XX Novel polymorphic variants of colony stimulating factor 1 receptor useful

XX in studying expression and function of the protein, useful for screening

XX candidate drugs to treat diseases e.g. inflammatory disorders.

XX Claim 15; Page 17; 164pp; English.

XX The invention describes a novel isolated polynucleotide (I) comprising a

XX sequence which is a polymorphic variant (PV) of a reference sequence for

XX colony stimulating factor 1 receptor (CSF1R) gene, found on the

XX polypeptide are useful for improving the discovery and development of

XX drugs for treating diseases associated with CSF1R activity, e.g.,

XX malignant histiocytosis, myeloid malignancies, and inflammatory disorders

XX for treating a specific condition or disease predicted to be associated

XX with CSF1R activity. Genotyping the CSF1R gene of an individual can also

XX be used in developing diagnostic tests and therapeutic treatments. (I) is

XX useful in studying the expression and function of CSF1R, and in

XX expressing CSF1R protein for use in screening for candidate drugs to

XX treat diseases related to CSF1R activity and in studying the effect of

XX the variation on the biological activity of CSF1R as well as on the

XX binding affinity of candidate drugs targeting CSF1R. Antibodies are

XX useful in a variety of diagnostic and prognostic formats and therapeutic

XX methods. A transgenic animal is useful in studying expression of the

CY 302 CTTGAGCCCGG 313

DB 4 CTTGAGCCCGG 15

RESULT 1202

AAS96144 AAS96144 standard; DNA; 15 BP.

AC AAS96144;

DT 26-FEB-2002 (first entry)

DE Human Acetylcholinesterase gene allele specific probe #7.

XX Human; ss; probe; allele specific oligonucleotide; ASO; AChE;

XX acetylcholinesterase; polymorphic variant; haplotyping; genotyping;

XX neurological disease; Parkinson's disease; Alzheimer's disease; cancer;

XX leukaemia; tumour; chromosome 7q22.

XX Homo sapiens.

XX WO200179219-A2.

XX 25-OCT-2001.

XX 11-APR-2001; 2001WO-US011853.

XX 14-APR-2000; 2000US-0197173P.

XX (GENA-) GENA15555 PHARM INC.

XX (KAZE/) KAZE1 A.

XX Bentivegna SC, Chew A, Choi JY, Koshy B;

XX WPI; 2002-055248/07.

XX New polymorphic variants comprising acetylcholinesterase (ACHE) isogene,

XX useful in expressing AChE protein for use in screening for candidate

XX drugs to treat diseases related to AChE activity, e.g. neurological

XX diseases or cancer.

XX Claim 16; Page 13; 79pp; English.

XX The invention relates to a polynucleotide comprising a polymorphic

XX variant of an acetylcholinesterase (ACHE) gene or fragment, protein or

XX complement, the variant comprising an AChE isogene defined by a haplotype

XX selected from haplotypes 1-20 listed in the specification. Also included

XX are methods for haplotyping and genotyping the AChE gene of an

XX individual, a method for predicting an association between a trait

XX and at least one haplotype or haplotype pair of AChE gene, recombinant

XX and at least one haplotype or haplotype pair of AChE gene, recombinant

XX nonhuman organisms transformed or transfected with the first nucleotide

XX where the organism expresses AChE protein encoded by the first nucleotide

XX sequence or encoded by the polymorphic variant sequence, an isolated

XX antibody specific for and immunoreactive with AChE, a method of screening

XX for drugs targeting the polypeptide contacting AChE polymorphic variant

CY 302 CTTGAGCCCGG 313

DB 4 CTTGAGCCCGG 15

RESULT 1202

AAS96144 AAS96144 standard; DNA; 15 BP.

AC AAS96144;

DT 26-FEB-2002 (first entry)

DE Human Acetylcholinesterase gene allele specific probe #7.

XX Human; ss; probe; allele specific oligonucleotide; ASO; AChE;

XX acetylcholinesterase; polymorphic variant; haplotyping; genotyping;

XX neurological disease; Parkinson's disease; Alzheimer's disease; cancer;

XX leukaemia; tumour; chromosome 7q22.

XX Homo sapiens.

XX WO200179219-A2.

XX 25-OCT-2001.

XX 11-APR-2001; 2001WO-US011853.

XX 14-APR-2000; 2000US-0197173P.

XX (GENA-) GENA15555 PHARM INC.

XX (KAZE/) KAZE1 A.

XX Bentivegna SC, Chew A, Choi JY, Koshy B;

XX WPI; 2002-055248/07.

XX New polymorphic variants comprising acetylcholinesterase (ACHE) isogene,

XX useful in expressing AChE protein for use in screening for candidate

XX drugs to treat diseases related to AChE activity, e.g. neurological

XX diseases or cancer.

XX Claim 16; Page 13; 79pp; English.

XX The invention relates to a polynucleotide comprising a polymorphic

XX variant of an acetylcholinesterase (ACHE) gene or fragment, protein or

XX complement, the variant comprising an AChE isogene defined by a haplotype

XX selected from haplotypes 1-20 listed in the specification. Also included

XX are methods for haplotyping and genotyping the AChE gene of an

XX individual, a method for predicting an association between a trait

XX and at least one haplotype or haplotype pair of AChE gene, recombinant

XX and at least one haplotype or haplotype pair of AChE gene, recombinant

XX nonhuman organisms transformed or transfected with the first nucleotide

XX where the organism expresses AChE protein encoded by the first nucleotide

XX sequence or encoded by the polymorphic variant sequence, an isolated

XX antibody specific for and immunoreactive with AChE, a method of screening

XX for drugs targeting the polypeptide contacting AChE polymorphic variant

Query Match 2.7%; Score 11.6; DB 1; Length 15;
 Best Local Similarity 91.7%; Pred. No. 4.2e+02;
 Matches 11; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

QY 76 AGGGCCCGCGAG 87
 Db 2 AGGCGCCGCGAG 13

RESULT 1203
 ABA99313/c
 ID ABA99313 standard; DNA; 15 BP.

AC ABA99313;

DT 13-MAY-2002 (first entry)

DE Human ALDH5 allele-specific oligonucleotide SEQ ID No 33.

XX ALDH5; human; gene; polymorphism; haplotype; aldehyde dehydrogenase 5;
 KW binding affinity; drug targeting; alcoholism; alcohol-induced disorder;
 KM antialcoholic; ss.

XX Homo sapiens.

XX WO200192279-A2.

XX 06-DEC-2001.

XX 29-MAY-2001; 2001WO-US017253.

XX 26-MAY-2000; 2000US-0207508P.

XX (GENA-) GENAISSANCE PHARM INC.

XX Duda A, Finkel K, Kazemi A, Messer C, Sanchis A;

XX WPI; 2002-122054/16.

XX New genetic variants with polymorphisms in the aldehyde dehydrogenase 5
 PT (ALDH5) gene, useful for studying the function of ALDH5, and for
 PT expressing ALDH5 protein which is useful in screening drugs for treating
 PT ALDH5-related diseases.

PS Claim 17; Page 80; 96pp; English.

XX This invention describes a novel isolated genes and haplotypes of the
 CC human aldehyde dehydrogenase 5 (ALDH5) gene containing polymorphic sites.
 CC The polymorphic ALDH5 variant is useful in studying the effect of the
 CC variation on the biological activity of ALDH5 and on the binding affinity
 CC of candidate drugs targeting ALDH5 for the treatment of alcoholism and
 CC alcohol-induced disorders. Polynucleotides comprising a polymorphic gene
 CC variant or fragment may be used for therapeutic purposes. ALDH5 protein
 CC isoforms may be used in assays to measure the binding affinities of one
 CC or more candidate drugs targeting the ALDH5 protein. ALDH5 proteins may
 CC be used to generate antibodies. Haplotyping method can be used by
 CC scientists to validate ALDH5 as a candidate target for treating a
 CC specific condition or disease predicted to be associated with ALDH5
 CC activity, and in the design of clinical trials of candidate drugs for
 CC treating a specific condition or disease predicted to be associated with
 CC ALDH5 activity. Information on polymorphisms on the ALDH5 gene can be
 CC applied for studying the biological function of ALDH5 as well as in
 CC identifying drugs targeting this protein for the treatment of disorders
 CC related to its abnormal expression or function. The products of a human
 CC invention have antialcoholic activity. This sequence represents a human
 CC ALDH5 allele-specific oligonucleotide described in the disclosure of the
 CC invention

XX Sequence 15 BP; 3 A; 5 C; 6 G; 0 T; 0 U; 1 Other;

Query Match 2.7%; Score 11.6; DB 1; Length 15;
 Best Local Similarity 91.7%; Pred. No. 4.2e+02;

Matches 11; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

QY 244 GCTTCCCGGCT 255
 Db 14 RCTTCCCGGCT 3

RESULT 1204

ABA02229/c
 ID ABA02229 standard; DNA; 20 BP.

AC ABA02229;

DT 12-FEB-2002 (first entry)

DE Human/mouse C/EBP phosphorothioate antisense oligonucleotide, SEQ ID:41.

XX Human; C/EBP alpha; CCAAT/enhancer-binding protein alpha; CEBPA;

KW transcription factor; tissue development; cellular function;

KW proliferation; differentiation; adipocyte; energy metabolism;

KW chondrogenic; ovulation; follicular development;

KW hepatic steroid-induced cell cycle arrest; GUT2 promoter regulation;

KW hormonal metabolic regulation; granulocyte development; cancer;

KW tumour formation; infection; inflammation; expression inhibition;

KW antisense therapy; quantitative real-time PCR primer; ss.

XX Homo sapiens.

XX Mus musculus.

XX Key

XX modified_base

XX modified_base

XX modified_base

XX modified_base

XX modified_base

XX modified_base

XX modified_base

XX modified_base

XX modified_base

XX modified_base

XX modified_base

XX modified_base

XX modified_base

XX modified_base

XX modified_base

XX modified_base

XX modified_base

XX modified_base

XX modified_base

XX US6306655-B1.
 XX 23-OCT-2001.
 XX 13-JUN-2000; 2000US-00593589.
 XX 13-JUN-2000; 2000US-00593589.
 XX (ISIS-) ISIS PHARM INC.
 XX Monia BP, Butler MM, Wyatt J;
 XX WPI; 2002-040202/05.
 XX New antisense oligonucleotides for modulating the expression of
 PT CCAAT/enhancer-binding protein alpha, particularly useful for
 PT preventing, delaying or treating infection, inflammation or tumor
 PT formation.
 XX Example 15; Col 42; 44pp; English.
 XX Sequences ABA02205-ABA02282 represent antisense oligonucleotides targeted
 CC to the human CCAAT/enhancer-binding protein alpha (C/EBP alpha) gene,
 CC which inhibit its expression. The antisense oligonucleotides were
 CC designed to target different regions of the human C/EBP alpha RNA, and
 CC were analysed for their effect on C/EBP alpha mRNA levels by quantitative
 CC real-time PCR. A similar investigation on mouse C/EBP alpha expression
 CC was performed using a subset of the antisense oligonucleotides that were

CC capable of hybridising to mouse C/EBP alpha mRNA. The C/EBP family of
CC proteins are a family of transcription factors which regulate the
CC expression of wide range of genes that control normal tissue development,
CC cellular function, cellular proliferation and functional differentiation.
CC C/EBP alpha (also known as CEBPA) is primarily found in tissues involved
CC in energy metabolism which have a capacity to metabolise lipids,
CC cholesterol and other sterols. It is thought to be involved in the
CC regulation of adipocyte and chondrogenic differentiation, and is also
CC involved in follicular development and ovulation, steroid-induced cell
CC cycle arrest in the liver, in controlling glucose transporter GLUT2
CC promoter activity, in the hormonal regulation of metabolism, and in
CC granulocyte development. The oligonucleotides of the invention are useful
CC for diagnosis, prevention and treatment of conditions associated with
CC C/EBP expression, such as cancer, tumour formation, infection, or
CC inflammation

SQ Sequence 20 BP; 2 A; 9 C; 6 G; 3 T; 0 U; 0 Other;
Query Match 2.7%; Score 11.6; DB 1; Length 20;
Best Local Similarity 77.8%; Pred. No. 7.3e+02;
Matches 14; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 266 GCACTCGAGCGAGCGCG 283
DB 18 GCACTCGAGCGAGCGCG 1

RESULT 1205
AAF27039
ID AAF27039 standard; DNA; 38 BP.
XX
AC AAF27039;
XX
DT 30-MAR-2001 (first entry)
XX
DE Human Sonic hedgehog (Shh) mutagenic primer, SEQ ID NO:43.
XX
KM Sonic hedgehog; Shh; polymer conjugate; polyalkene glycol group;
XX bioavailability; formulation; neurological disorder;
XX inflammatory disorder; autoimmune disorder; cancer;
XX neurodegenerative disorder; Parkinson's disease; Huntington's disease;
XX Alzheimer's disease; neurological injury; stroke; multiple sclerosis;
XX malignant glioma; medulloblastoma; neuroectodermal tumour;
XX mutagenic primer; ss.
XX
OS Homo sapiens.
OS Synthetic.
OS
XX
PN WO20007337-A1.
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PD 07-DEC-2000.
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PF 26-MAY-2000; 2000WO-US014741.
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PA (BIOT) BIOGEN INC.
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XX Peginsky RB, Taylor F, Garber E;
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XX WPI; 2001-049927/06.
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XX Modified hedgehog protein, useful in the treatment of Parkinson's disease
XX and Huntington's chorea, comprises a polymer containing a polyalkylene
XX glycol group linked to any residue other than the N-terminal and lysine
XX residues.
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XX Example 6; Page 77; 157pp; English.
XX
XX The invention relates to novel polymer conjugates of hedgehog proteins
XX which have increased bioavailability. The hedgehog proteins are
XX conjugated to a non-naturally-occurring polymer comprising a polyalkylene

CC glycol group, with the proviso that the polymer is not conjugated to the
CC N-terminus, or to lysine residues of the hedgehog protein. The hedgehog
CC protein used in the conjugate may be a wild-type or mutant Sonic hedgehog
CC (Shh), Indian hedgehog (Ihh) or Desert hedgehog (Dhh) protein, or may be
CC a hedgehog fusion protein. The invention also relates to methods of
CC defining and mapping functionally important regions of a protein by
CC modifying accessible amino acid side chains, and determining the effect
CC the position and/or type of modification have on the activity of the
CC protein. The hedgehog polymer conjugates may be used in the management of
CC various medical conditions including various neurological disorders,
CC inflammatory and autoimmune diseases, and cancers. In particular, they
CC may be used to prevent preventing or ameliorate neurodegenerative
CC disorders (e.g., Parkinson's disease, Huntington's disease, Alzheimer's
CC disease); age-associated neurological disease; neurological injury and
CC trauma; immunological diseases of the nervous system (e.g., multiple
CC sclerosis); stroke; and malignant gliomas, medulloblastoma and
CC neuroectodermal tumours. The modifications made to the hedgehog protein
CC may result in increased half-life, altered tissue distribution (such as
CC an improved ability to stay in the vasculature for longer periods of
CC time), increased stability in solution, protection from proteolytic
CC degradation, or reduced immunogenicity. In particular, the ability to
CC remain in the vasculature for prolonged periods may allow a hedgehog
CC protein of the invention to cross the blood-brain barrier, and an
CC increased thermal stability would be an advantage when formulating the
CC hedgehog protein in powder form. The present sequence represents a human
CC Sonic hedgehog mutagenic primer used in an exemplification of the
CC invention

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QY 156 GCGTTCGACTGCGAGTCTACGAGTC 181
DB 13 GCGTTCGACTGCGAGTCTACGAGTC 38

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